NOTICE.—The Sherman Funeral Journey from New York, with Scenes and Incidents along the Route, and the final Ceremonies at St. Louis, will be Illustrated in the next Number of HARPER'S WEEKLY.

HARPER'S WEEKLY
A
JOURNAL OF CIVILIZATION

VOL. XXXV.—No. 1784.
NEW YORK, SATURDAY, FEBRUARY 28, 1891.
TEN CENTS A COPY, INCLUDING SUPPLEMENT.

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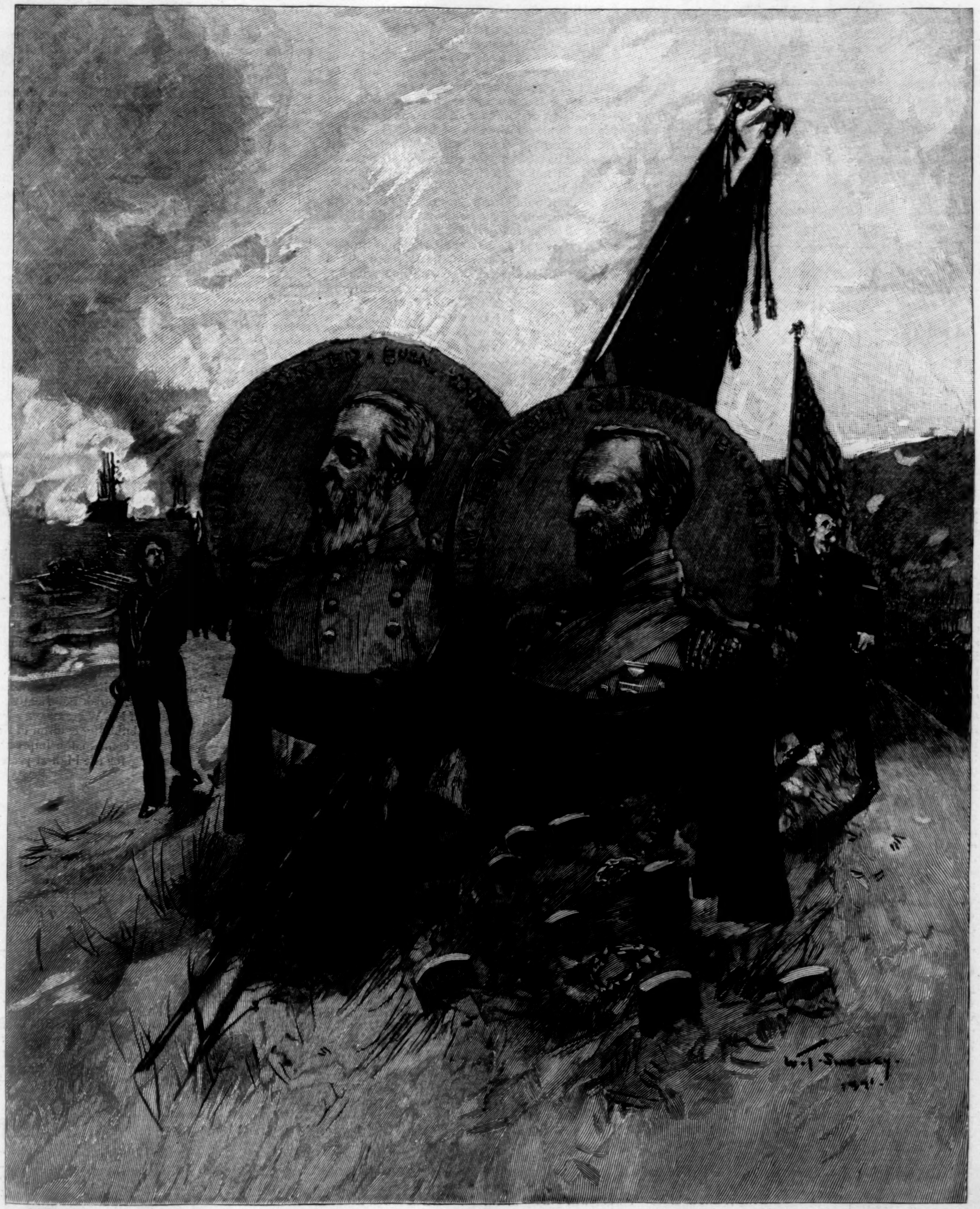

HARPER'S MAGAZINE

FOR MARCH.

The Literary Landmarks of Edinburgh. By LAURENCE HUTTON. With sixteen illustrations, drawn by JOSEPH PENNELL.

American Leads at Whist, and their History. By N. B. TRIST.

Of especial interest as being the work of the originator of American leads at whist, and one whose suggestions have been adopted by "Cavendish," and accepted by all advanced players in England and America.

Wessex Folk. A story. By THOMAS HARDY. Part I. With illustrations by CHARLES GREEN and ALFRED PARSONS.

Comedy of Errors. With eight illustrations (including frontispiece) by EDWIN A. ABBEY. Comment by ANDREW LANG.

The Argentine Capital. By THEODORE CHILD. With thirteen illustrations, drawn by C. S. REINHART, H. D. NICHOLS, and EDMUND H. GARRETT.

Moods. A poem. By W. D. HOWELLS.

In the "Stranger People's" Country. A story. By CHARLES EGBERT CRADDOCK. Part III. Illustrated by W. T. SMEDLEY.

The Chinese Leak. By JULIAN RALPH. With four illustrations, drawn by FREDERIC REMINGTON.

March Days. A poem. By RICHARD E. BURTON.

Nationality in Music. By FRANCIS KORBAY.

In the Vestibule Limited. A story. By BRANDER MATTHEWS.

Memories of the St. John's. A poem. By HEZEKIAH BUTTERWORTH.

Professional Beauties of the Past. Full-page illustration, drawn by GEORGE DU MAURIER.

The usual **Editorial Departments,** conducted by GEORGE WILLIAM CURTIS, WILLIAM DEAN HOWELLS, and CHARLES DUDLEY WARNER.

PUBLISHED BY HARPER & BROTHERS, NEW YORK.

No. 1784.

HARPER'S WEEKLY,

WITH COVER, AND SUPPLEMENT CONTAINING AN ILLUSTRATION OF THE FUNERAL OF ADMIRAL DAVID D. PORTER, IN WASHINGTON, DRAWN BY W. A. ROGERS.

TERMS: 10 CENTS A COPY.—$4 00 A YEAR, IN ADVANCE.

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A LATE DEBATE IN THE HOUSE.

IT was a striking coincidence that the House of Representatives should have recently heard from the chairman of its chief committee that the spoils system is distinctively the American system of the civil service which the country would not willingly relinquish, while at the same time the Senate should have been hesitating to acknowledge the property right of a foreign author in his own work. The attitude of the country as thus presented is not an agreeable one, nor one of which an intelligent American can be proud. The debate in the House upon the appropriation for the Civil Service Commission, however, was very interesting for several reasons. The ardor and acrimony with which Mr. GROSVENOR and Mr. CANNON made their attack showed that the reformed system is exceedingly effective in restraining the ravages of mere partisanship, while the hearty defence of the reform by Messrs. LODGE, MCCOMAS, BUTTERWORTH, DINGLEY, MOORE, GREENHALGE, and LEHLBACH among the Republicans, and among the Democrats Messrs. TRACEY, of New York, and BOATNER, CLEMENTS, and DOCKERY, of Louisiana, Georgia, and Missouri respectively, showed how strong and aggressive the reform sentiment has become.

Mr. LODGE mercilessly exposed the ignorance and inconsistency of Mr. GROSVENOR, and Mr. BUTTERWORTH did not spare Mr. CANNON. Mr. GROSVENOR, with a ludicrous misapprehension of facts, lamented that Republican advocacy of civil service reform in Massachusetts had driven the party from power, by extruding noble youth like ANDREW and HOAR. But Mr. LODGE corrected him at once, assuring him that he was utterly mistaken, that the young men of whom he spoke, so far as the question of civil service reform was concerned, "were actuated by hostility to just the doctrines that have been preached by the gentleman from Ohio on this floor, which have cost us hundreds of votes in Massachusetts and in New York as well. You may make light of it if you will. It has cost us hundreds of votes of thoughtful, intelligent young men, who, whether they are right or wrong, do not believe in the spoils system." Mr. MOORE, of New Hampshire, made a strong plea for the reform. Mr. DINGLEY, of Maine, foiled the parliamentary game of Messrs. CANNON and GROSVENOR, and although upon division the vote in their favor was 92 to 54, when he demanded tellers, and gentlemen were to go upon record, the result against them was 95 to 76, and was received with "loud applause."

No one who reads the debate but will agree that the ability, the warmth of conviction, the largeness of view, and elevation of tone, were wholly with the advocates of the reformed system, while the vote, in prospect of a record for the country to see, showed the conviction of members that the reform has a very strong hold of the public mind. On the first day of the debate Mr. SPINOLA, the especial champion of the spoils system, said that there were not ten men on the floor who were really friends of the reform. Mr. BUTTERWORTH instantly asked him whether he meant to say that three hundred and ten men in the House were arrant hypocrites. Mr. SPINOLA'S remark was significant. He belongs to a class of politicians who detest reform, because they feel instinctively that with its progress and prevalence their kind diminishes. As the good fight goes on it is plain this year, as it was last, that the character and ability of the House are the advocates and defenders of reform.

THE STATE LIBRARY SCHOOL.

THE Regents of the University of the State of New York have recently taken action of great importance and interest to the cause of education. The law of 1889, which consolidates former laws concerning the university and repeals many, makes the State Library, of which the Regents are trustees, an institution of the university, and includes it among the effective educational forces of the State. This is in accord with the modern view of a library, which regards it as subserving its true purpose only when all its books are in use, and not when they are secluded upon its shelves, and when in every practicable way it is a positive form of public instruction. But to make a great free collection of thousands and hundreds of thousands of books really serviceable to the public, requires a cultivated special knowledge and intelligence in the librarians, and a carefully considered system of details in organization and management, the extent and character of which are known only to students of the subject. A great library supported by the State for the benefit of the people cannot serve the purpose for which it is established, for example, unless the librarian is able to advise the students, especially those whose constant occupation prevents much familiarity with books, but who are earnestly interested in acquiring the best special information, where such information can be found. The larger part of those who resort to a public library because of their inability to buy books, or even to know what books are necessary for their purpose, as in mechanics or miscellaneous knowledge, are absolutely at a loss when they are in the library, unless they can find in the librarian a counsellor and guide and teacher.

An important branch of study has thus arisen, known as library science, or the knowledge which makes the library a school of the highest value to the great body of the public. For many months the Regents, as trustees of the State Library, and the agents of the State in the interests of higher education, have had the subject under careful trial and observation. They have wished not only to make the State Library most serviceable to the public, but to enable it to stimulate into greater usefulness all libraries in the State which, at their discretion, the law includes in the university. The patient experiment of the school of library science has been most interesting and most gratifying. Two points have been strictly guarded—the interests of the public in the use of the library and the interests of the tax-payers. Nearly two years' experience has proved that the necessary instruction can be carried on without deranging in the least the use of the library, and without the aid of State money. The result of the good work has been that during the last year fifteen librarians or assistants were furnished to libraries in the State of New York, and seven other States have found twenty library assistants among the pupils of the New York State Library School. For this service to the State of New York in greatly increasing the practical value of its local libraries, and in attracting libraries in other States to look to New York for trained librarians, had a proper sum of money been found necessary, it would have been well spent. Happily the result was attained without it.

The Regents have now completed the organization of the school, in which almost all the pupils are young women, to whom trained library ability opens a new career. They have authorized certificates and degrees to indicate proficiency and mastery in this knowledge, but degrees very strictly guarded and limited, and which will be extremely useful as indicating the range of the acquirements of librarians. The school, which has already justified itself, is an effective step in turning to the best public account the resources of the State Library, and in thus adding to the beneficent provisions for popular education in New York. The standard of that education was never so high as it is now, and in the noble emulation of popular instruction in both primary and secondary schools New York holds a pre-eminence which every intelligent New-Yorker will gladly maintain.

NEW YORK POLITICS.

NEW YORK politics have been always entertaining to outsiders, but incomprehensible and exasperating. The State is so large that, except under the pressure of some overpowering issue, which compels harmony on both sides, parties are always divided among themselves in a highly acrid and angry manner. The Republicans have taken great comfort in the differences between the friends of Mr. CLEVELAND and Governor HILL, and have hoped by careful fostering of that dissension to carry the State in '92. But Senator BROWN made a stroke to baffle this hope by bringing Mr. CLEVELAND and Mr. HILL together at a dinner table, and some excellent people have been persuaded that there is no reason for further apprehension, since the gentlemen politely wished each other good-evening. But while the Republicans have regarded with pleasure the blackness of the Democratic kettle, they have had their own pot to consider. If the friends of Governor HILL were not friends of Mr. CLEVELAND, what was to be said of Mr. PLATT'S cohorts and the hosts of Mr. WARNER MILLER? They seemed to be as much arrayed "over against" each other as the Democratic bands.

Stimulated perhaps by the labors toward Democratic harmony of Senator BROWN, some Republican pacificators have sought for party accord on their side. If Mr. CLEVELAND and Mr. HILL could be brought to say mutually and politely good-evening, might it not be possible to cause Mr. PLATT and Mr. MILLER, not perhaps to say good-evening to each other, because human nature is still imperfect, but possibly to say a common good-evening to Mr. DEPEW? Might not all Republicans, whether friends of Mr. MILLER or of Mr. PLATT, agree to vote for Mr. DEPEW for Governor, and having elected him, nominate him to the Presidency, and having again elected him, proceed harmoniously to distribute the spoils, and live happily ever after? This, as we write, is the pleasing hope of many who desire a surcease of Republican strife, and ask nothing more than party calm and perpetual power. In the other political family, meanwhile, there are fresh vexations. Shall Mr. HILL cease to be Governor on the 4th of March, and in serene inactivity await the beginning of his Senatorship in December? Or shall he assume that the people who elected him Governor for three years, and are so satisfied with his services that by their representatives they have now called him to the Senate, desire him to serve them in the one office until it is necessary for him to take the other?

It seems to be very probable that this is the view that the Governor entertains. Indeed, it is suggested that to balk his purpose his Republican opponents may persuade the President to call an extra session, and so "force the Governor's hand." That would be, indeed, New York politics, and President HARRISON might possibly recall Governor JOHN JAY'S comment upon a proposition of HAMILTON'S, "Impossible for me to consider." But should this be done, there would be yet one stroke left for the Governor. He might resign the Senatorship. That is highly improbable, but it is not impossible. The Governor would probably do whatever he thought necessary to secure the prize for which he plays. The Senatorship is merely a counter to a player for the Presidency. Governor HILL decided to take it because at the time it seemed to him "the correct card," and he is a shrewd player. If the aspect of the game should change and seem to him to require so extraordinary a play, he would probably relinquish it. Meanwhile the publication of the letter of Mr. WATTERSON, which has added more spice to the bubbling caldron of New York politics, has served to confirm the impression that the Governor is playing for the highest prize in dead earnest.

MR. QUAY'S DENIAL.

MR. QUAY and his friends cannot suppose that his defence in the Senate will of itself avail to exonerate him. He makes an explicit denial and explanation. But all that he says he could as readily have said long ago, when the charges were made. The delay admits of no favorable interpretation. He cites ALEXANDER HAMILTON, but HAMILTON did not allow years to pass before his complete explanation. He answered promptly and conclusively, and, at a cost inconceivably painful, disposed effectually and forever of the charges against his official honesty. The value of Mr. QUAY'S defence depends wholly upon his word. It is a simple denial. But his previous course and long delay and the method of his defence have not encouraged confidence in his simple statement. When charges so very grave and circumstantial are made against a public man he cannot set them aside by silence, or by calling them mud-flinging. He can dispose of them only by a statement so fortified by acknowledged fact and affidavit that no doubt remains, or by a summary suit for libel, which will force the publication and establishment of the facts.

If it was wise for Mr. QUAY to acquiesce for all this time in the universal and reiterated accusation, and the consequent general public verdict against him, it is useless now for him to deny it except in a manner which would completely repel the charge and end it forever. He has not done it. It is doubtful whether of the great multitude who have read his paper the impression of a single man has been changed. Those who have supposed the stories to be true do not now think them mere calumnies because they are declared to be so. Those who have wondered and doubted are not relieved, because they cannot see any reason for the statement which has not always existed, and because they see no corroboration of the important denials made by Mr. Quay. The scene in the Senate was not reassuring. So far as reported, a Senator who for years has been charged in detail with official dishonesty and irregularity, who has been pilloried in the press as a dishonest man, whose party in his own State has voted against its own candidate because he was believed especially to represent Mr. Quay, and has permitted the Democrats to carry the strongest Republican State rather than permit Mr. Quay to seem to command Republican confidence—a Senator whose name has become the synonyme of official roguery rises to repel the accusations and confound his accusers. He reads his explanation in perfect silence. He ends it and resumes his chair. The "Senators scattered to their seats," the routine of business proceeds, not one Senator, so far as appears, hastening to congratulate him and the Senate that the stain is removed from both.

This is certainly, under the circumstances, an extraordinary scene. But it is symbolical of the general effect of the denial. Hundreds of thousands of readers scattered to their business after reading the explanation. But how many of them felt that a conspicuous public man had dispelled a dark cloud that had rested upon his name, and had cleared the national honor which is involved in the character of all its representatives? The facts are still obscure, and the incident is one of the most painful of its kind in our political annals.

SHERMAN AND PORTER.

There has seldom been a more universal tribute of sincere affection for a public man than that which followed the death of General Sherman. There was nothing formal or perfunctory in it. It was the expression of a whole people deeply touched by the loss of a fellow-citizen, whose simplicity and rectitude and devoted patriotism were as conspicuous and well known as his signal military ability and his illustrious public services.

No career is more exposed to sharp criticism than that of the soldier, and no profession probably is more divided by differences. But no one could have talked with General Sherman about disputed points in the war of which he was a chief figure without perceiving that the generosity of his judgment was as striking as the frankness of his speech. Conversation and public comment will long teem with anecdotes of him, for nothing was more characteristic of him, as Mr. Schurz said in his remarks at the Chamber of Commerce, than his total want of self-conscious historic dignity.

His death, almost simultaneously with that of Admiral Porter, has been already said to mark the close of an epoch. The younger generation now active in affairs has no personal recollection of the civil war. The few men who would be acknowledged as its chief leaders are now gone, but while Sherman and Porter still survived, the epoch survived with them. The obsequies of Sherman and Porter end it, as those of Adams and Jefferson sixty-five years ago ended the Revolutionary era. We may truly say now of our two famous men, as Webster said then of the earlier patriots: "Death has not surprised us by an unseasonable blow. We have, indeed, seen the tomb close, but it has closed only over mature years, over long-protracted public services, ... and over life itself only when the ends of living had been fulfilled."

THE ORCHESTRA GUARANTEE FUND.

Every lover of music will be glad to hear that a guarantee fund has been obtained for the maintenance of a permanent orchestra in New York. But it must be said frankly that it is surprising such a fund was not pledged for Theodore Thomas, when it was known two or three years ago that for the want of it he had been compelled to disband his orchestra. To him, the incomparable conductor, more than to any other individual, is due the cultivation of the taste which now demands and justifies the fund, and if it was understood too late that after waiting for two years in vain for a fund in New York his engagements with Chicago honorably prevented his entertaining further propositions here, the fact is none the less to be regretted.

His departure is a musical loss to the city which cannot easily be made good. His masterly ability, his admirable taste, his long experience, and his happy comprehension of the public taste, with his firm persistence in constantly developing it without fatiguing it, leave him without a rival and in the prime of his power. Mr. Damrosch, who will conduct the orchestra for which the guarantee fund has been secured, has the advantage of the high regard as a musician in which his father was held and of his own accomplishment. As a great conductor, however, he has his spurs to win. But he has every good wish of every lover of the higher music that he may be able to maintain the standard of Theodore Thomas.

No one who has watched the career and enjoyed the work of Mr. Thomas in bringing the musical taste of this community to its present point but must congratulate Chicago upon permanently securing his services. His old friends will hear with delight of his new triumphs, and whatever the musical progress and prosperity of New York, the happy impulse which he has given them will never be forgotten.

THE STATE INSANE.

The public interest in the care of the insane was demonstrated in the discussion which led to the law of last year providing that the poor insane shall be cared for by the State. There is no question that the practice of leaving them to the mercies of the county poorhouse is cruel. The cruelty is heightened by the tradition of the hopelessness of the relief of such patients who had been two or three years under State care, and because of such hopelessness were remitted to the poorhouses. All public "institutional" care is open to great abuse and to just severity of criticism. Occasional revelations, especially in the case of the insane, show, even in institutions of high repute, revolting instances of cruelty and tyranny. But in this respect county care cannot be expected to be better than that of the State.

It is, of course, a conclusive reason for not removing at once all insane patients from the county poorhouses to the State hospitals that there is not adequate accommodation, and it is also a conclusive reason for the passage of the bill appropriating money to make such removal properly practicable. The State hospitals are usually under the charge of experienced alienists, and no one to whom the choice was offered of placing an insane friend in an institution would hesitate between a county poorhouse and a State hospital.

There are now eight State asylums for the insane. They can accommodate in round numbers 6000 patients, and their total cost during the last fiscal year was something less than $9,000,000. The cost to the State per capita is about $1500. The report of the State Commission in Lunacy, to which we owe these facts, states that the whole number of asylums in the State, public and private, is thirty, and the whole number of insane persons under treatment is 16,002. The report urges greater uniformity of control, and, to this end, more centralized power. Its suggestions are well considered, and the whole subject is of such a character that, for the benefit of this most hapless class of persons, public attention should be constantly drawn to it.

THE POPE AND AMERICAN SCHOOLS.

It is reported from Rome that the Pope is preparing a letter to Cardinal Gibbons upon the question of school education in the United States. The Pope could address himself to no more timely topic, and it is to be hoped that if he means to give advice, he will be well advised in advance by his American counsellors. The institution which Americans guard with the most sensitive jealousy is the public school, and all attempts, however specious and plausible, to give it a sectarian character are instinctively resisted. The reasons for this view are many and familiar, and it is unfortunate if the Pope is not aware of them.

The vast increase of a population foreign born and trained in wholly alien traditions, not speaking our language, and strangers to our institutions, customs, and political life, is one of the most serious questions that now confront American patriotism and intelligence. The great corrective of this unquestionable peril lies in the public school which freely educates the children. This nationalizing institution is threatened by nothing so much as the disposition to submit it to sectarian control, and especially the control of a sectarianism which in its allegiance and direction is itself essentially foreign.

The very fact that an Italian clergyman, for such is the Pope, writes to American clergymen with an authority which they respect as sacred in regard to their conduct as American citizens is in itself extraordinary. If an American clergyman could write with similar authority to Italian subjects, the government of Italy would most certainly view the proceeding with very great attention. It is, however, open to any European clergyman to write to any number of American citizens upon the public schools or upon any other question of public interest. But if he should advise or encourage them to take any course which is plainly repugnant to fundamental American principles, his advice would interest a very much larger body of Americans than his correspondents.

THE DEMOCRATIC PARTY AND SILVER COINAGE.

The late letter of Mr. Cleveland will have the good effect of bringing his party to its bearings upon the question of free silver coinage. The fact that he was very generally accepted by his party as its probable candidate, and that the question of free coinage, by detaching a considerable number of Republican Senators from their party, had suddenly acquired a primary importance in the public mind, gave to his letter peculiar interest and importance. So clear and strong and crisp a statement, leaving no chance for equivocation or misconception, naturally apprises the Democratic party that if it be a free silver coinage party Mr. Cleveland cannot be its candidate.

The letter therefore rises to the dignity of an event. The Democratic Governor of Massachusetts at once heartily and unreservedly commended it. The Democratic, or Alliance, Governor of South Carolina instantly asserted that it withdrew Mr. Cleveland from consideration as a candidate. Other expressions in the Democratic press and from Democratic public men show the same difference of opinion, while the remarks of the Republican leader Mr. McKinley, at Toledo and in an interview, show his belief that even Republican cajolery of the silver men is a winning card.

Mr. Cleveland's instinct in this matter is undoubtedly sure. The Democratic adoption of the silver policy would divide the party, and again make the Republican party the exclusive party of sound currency. Mr. McKinley is a Republican party leader, but his talk upon the subject is perilously near demagoguery. The silver question in its present aspect, if made an issue, would become the controlling issue, and shake both parties. There is no doubt that the Democratic drift toward free silver is already, and will be more and more, a serious injury to that party by repelling the support of those who hold sound financial views. Opposition to extreme protection will not persuade sensible men to sustain a party which endangers the entire business interests of the country by tampering with the currency against all the warnings of sound principle and experience.

PERSONAL.

The principal opposition in the House to the recent bill to increase Mrs. General Custer's pension came from a member from Indiana, who seemed to think that army officers' widows lived lives of ease and luxury, and did nothing to support themselves. When he learned, however, that Mrs. Custer was one of the busiest women in the country, and had been hard at work for fourteen years, he turned about and made a speech in her favor, and the bill went through. Mrs. Custer is now preparing a series of talks on "Plains Life," for delivery before school girls and boys and before women's clubs. With her husband's sister, Mrs. Calhoun, who is also a busy woman, she has gone into temporary retirement at Atlantic City, to recruit her strength for future work.

—Miss Dolores Marbourg, who has been collaborating a novel with George Cary Eggleston, is a slender, graceful young girl. She dresses picturesquely, and while not strictly beautiful, is exceedingly attractive. Constant association with foreigners in her early youth has left its mark upon her language, and she speaks a pretty half-broken English, with a rising inflection of voice that is very charming. Her former home was in Atchison.

—The sale of George I. Seney's collection of pictures realized $665,550, which, with the exception of the sale of Mrs. Mary J. Morgan's paintings in 1886 for $885,300, was the largest sum ever received at a similar auction. Mr. Seney is said to have made a good profit on his pictures, although some brought less than the original cost.

—Claus Spreckels, the California sugar king, is growing old, and his hair is quite white. He is just as keen and energetic as ever, however, and in looking after his three large refineries on the Pacific coast and one at Philadelphia he manages to keep busy.

—A bullet which was shot into the cheek of Judge Calvin E. Pratt, of Brooklyn and the State Supreme Court, at the battle of Gaines Mill, Virginia, on June 27, 1862, has recently been removed. Judge Pratt was a Colonel at the time, and his wound was at first supposed to be fatal. For the past twenty-five years he has suffered much pain and inconvenience from the leaden pellet, but not till lately was it considered safe to remove it.

—Charles E. Roche, the cable editor of the *World*, is by nature and acquirement one of the few men who possess the qualifications of his position. With a "nose for news" he combines experience, having worked on leading papers in this country and Canada, and a long memory for persons and events which enables him to intelligently elaborate a skeleton despatch that has been received by cable. Mr. Roche has a good reference library of his own, and has filled a number of scrap-books with carefully arranged clippings from leading European papers, his accomplishments including a knowledge of several languages. His grandfather was Ignaz Moscheles, the composer, and friend and teacher of Mendelssohn, and his father, Antonin Roche, is well known in England as a professor of French literature.

—W. B. Richardson, the Boston naturalist, is exploring the forests of Central America in the interest of the British Museum. He has met with numerous adventures, and has discovered several new species of birds.

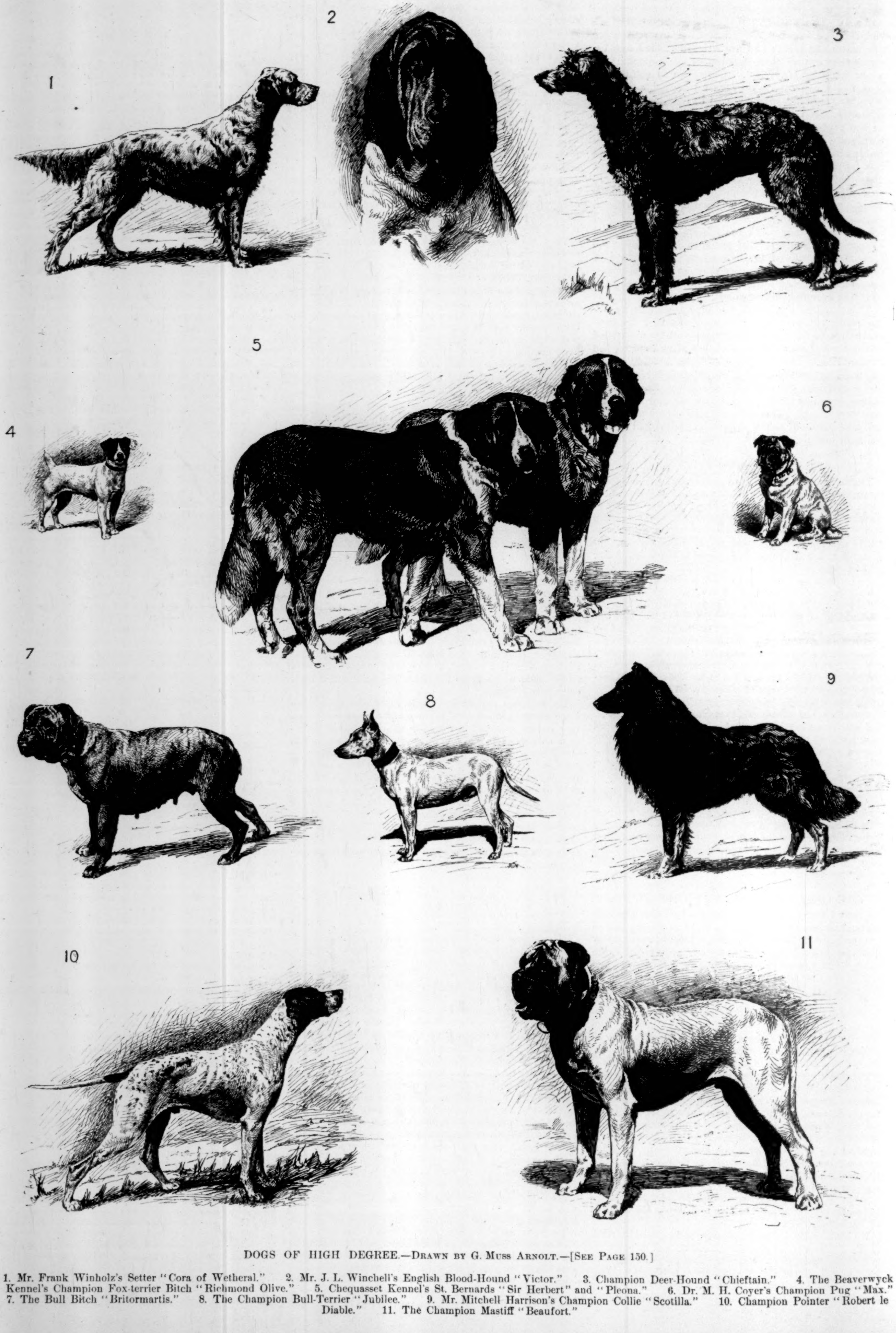
—Mrs. Elizabeth B. Custer tells the following interesting anecdote of General Sherman: Last winter I saw a very marked example of the simplicity and appreciation of General Sherman's character. I chanced to be on a Sixth Avenue surface car with him, and as we talked on various topics he said, "I'm in debt to this line," and in reply to my question how it happened to a man who had such a horror of indebtedness as he, he said: "Not long ago I came in a car and paid my fare. In a few moments the conductor came to me and handed back my five cents. 'What's wrong, young man?' I asked, and then he said: 'General, I didn't know it was you when you came in. The people on the platform told me. If I had 'a' known it was you, I wouldn't have taken a cent. I can't take nothing from a man that fi't like you.'"

—Professor Clement L. Smith, the Dean of Harvard College, has resigned his office, and will give his attention entirely to study and teaching. He retains his professorship of Latin.

—General Miles, the Indian fighter and pacificator, is an expert rider of the bicycle.

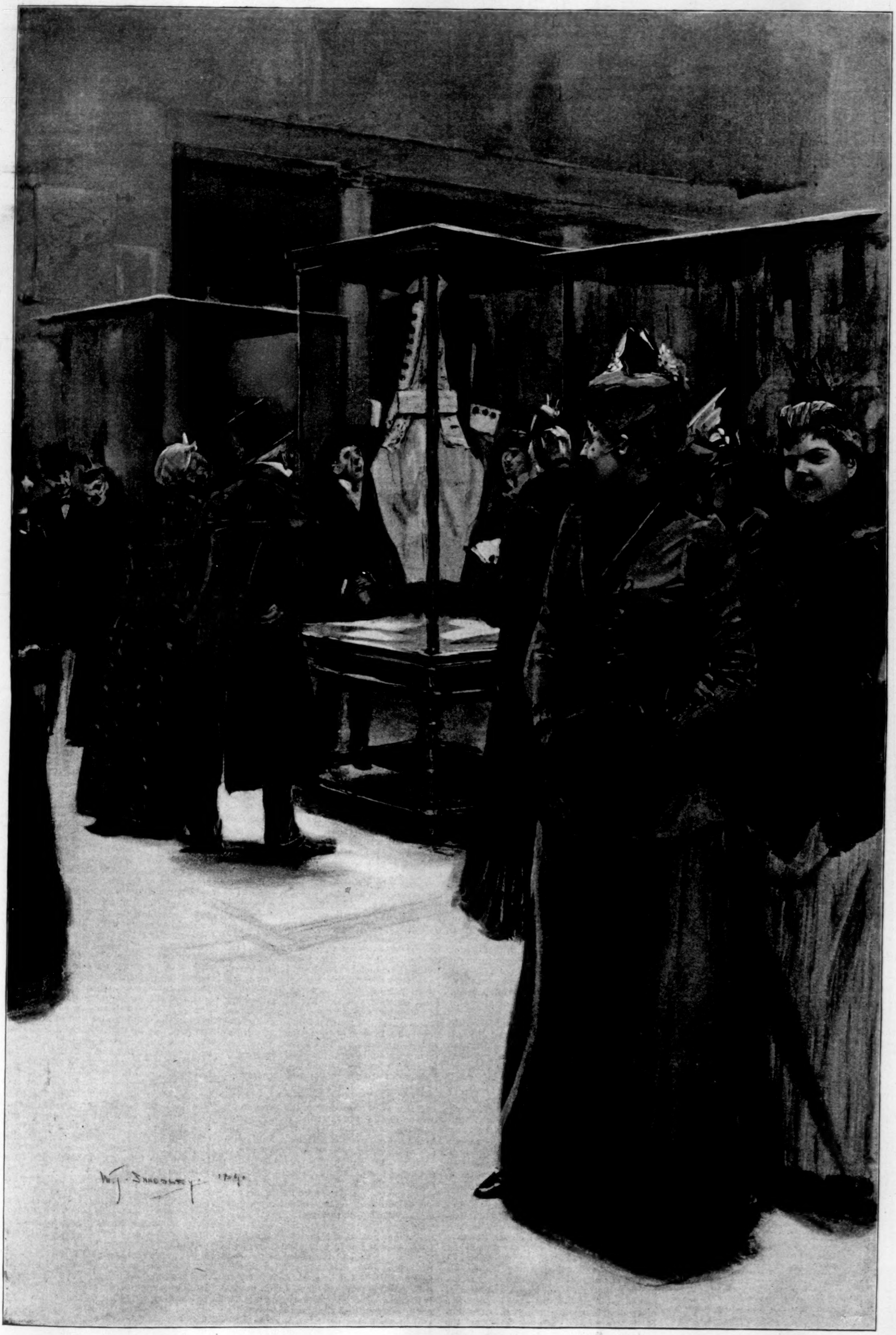
—The Boston *Traveller*, in a recent editorial article, said some very pleasant things about Mr. Will Carleton apropos of his lecture in that city. "America," the writer said, "has rarely had a man upon the platform who would please and profit every audience so certainly as he. His poetic gift is so unique as to mark him a genius. His themes fruit so naturally from human nature that no intellect is unmoved by his wit, no heart untouched by his pathos. His lines are apparently written with an audience in mind, for rich as they are when read in the home, they have a rarer charm when he speaks them from the platform. Boston would be the better for it if she could have him speak to crowded halls many times each year. He is not a fad, but he is a grand man, doing a deal of good in a charming way."

—One of the latest letters written by General Sherman, if not the last, was one dated February 3d, and addressed to Benjamin H. Fields, of New York, thanking him for a copy of the *Recollections of George W. Childs*. The General wrote of the publisher: "Whilst essentially American, he does not limit his expenditure, as most rich men do, to their own locality, but he takes in the whole world, as illustrated by his memorial fountain to Shakespeare at Stratford-on-Avon, and his memorial windows and tablets at Westminster and Winchester, England. I am not sure you know him personally. If not, and you want to meet him, I can bring you together at my table some time this spring. With great respect, your friend,—W. T. Sherman."



DOGS OF HIGH DEGREE.—DRAWN BY G. MUSS ARNOLT.—[SEE PAGE 150.]

1. Mr. Frank Winholz's Setter "Cora of Wetheral." 2. Mr. J. L. Winchell's English Blood-Hound "Victor." 3. Champion Deer-Hound "Chieftain." 4. The Beaverwyck Kennel's Champion Fox-terrier Bitch "Richmond Olive." 5. Chequasset Kennel's St. Bernards "Sir Herbert" and "Pleona." 6. Dr. M. H. Coyer's Champion Pug "Max." 7. The Bull Bitch "Britormartis." 8. The Champion Bull-Terrier "Jubilee." 9. Mr. Mitchell Harrison's Champion Collie "Scotilla." 10. Champion Pointer "Robert le Diable." 11. The Champion Mastiff "Beaufort."



GEORGE WASHINGTON RELICS AT THE NATIONAL MUSEUM, WASHINGTON.—DRAWN BY W. T. SMEDLEY.—[SEE PAGE 159.]

DOGS OF HIGH DEGREE.

BY JNO. GILMER SPEED.

THE yearly dog shows in New York held by the Westminster Kennel Club have become more popular each season. The show this year is the largest ever held in this country, and the animals on exhibition and contesting for prizes are not inferior to those to be seen at the English bench shows. Our fashions in dogs come from England, and most of our most notable prize-winners are of English strains of blood. But our dog-fanciers, since the establishment of bench shows in America, have taken such pains in breeding that we now have dogs as good as can be found anywhere. In this show there are 1526 dogs. This is 50 more than last year, and 200 more than in 1889. There are 58 Mastiffs, 197 St. Bernards, 3 Blood-hounds, 36 Great Danes, 10 Newfoundlands, 8 Russian Wolf-hounds, 20 Deer-hounds, 41 Greyhounds, 28 Fox-hounds, 107 Pointers, 79 English Setters, 102 Irish Setters, 42 Gordon Setters, 7 Chesapeake Bay Dogs, 107 Field Spaniels, 119 Collies, 27 Poodles, 5 Bull-dogs, 37 Bull-terriers, 3 Bassett Hounds, 30 Dachshunds, 24 Beagles, 161 Fox-terriers, 31 Irish Terriers, 5 Welsh Terriers, 7 Dandie Dinmonts, 6 Bedlington Terriers, 6 Skye Terriers, 3 Clydesdale Terriers, 14 Black-and-tan Terriers, 2 White English Terriers, 4 Scotch Terriers, 35 Yorkshire Terriers, 9 Toy Terriers, 33 Pugs, 55 Toy Spaniels, 8 Italian Greyhounds, 6 Schipperkes, and 5 of miscellaneous kinds.

Baron Cuvier said that the domestic dog was the "completest, the most singular, and the most useful conquest ever made by man." To a person unfortunate enough not to be fond of dogs this sounds like an extravagant statement, but the affirmative of it could be maintained with much force, and the real dog-lover would maintain it with an enthusiasm which would probably defeat the purpose of his argument. Whatever may be the value of the domestic dog in comparison with the other animals which man has subjugated and trained, there can be no question of the utility of the dog in his various capacities—as hunter, shepherd, watch-dog, friend, companion.

Nearly all of the best breeds of our American dogs are of British origin, and since during the past two decades more attention has been given to breeding than ever before in this country, there have been many importations of dogs of all the various breeds. These importations and this careful breeding have been greatly stimulated by the bench shows which are held annually in various parts of the country. The popularity of bench shows is conclusive evidence of the very great general interest felt in dogs by all classes of people. The great majority of the visitors to these shows are city people who cannot themselves keep dogs, and therefore the evidence of interest is all the more conclusive. These shows are generally if not always held by kennel clubs, such, for instance, as the Westminster Kennel Club, of New York; the New England Kennel Club, of Boston; the Maryland Kennel Club, of Baltimore; the Cincinnati Kennel Club, etc., etc. All of these clubs have united in forming a general organization, called the American Kennel Club, to the meetings of which each local club sends delegates. This general club is not only a legislature, but a court. It makes laws, tries cases, and enforces penalties. The affairs conducted by this club are so large that a regular business office is maintained in this city, and a corps of clerks is kept busy in keeping the records and publishing them. For the latter purpose a monthly paper is issued, and breeders and exhibitors must examine it carefully so as to see what laws are promulgated, what awards have been made, and what disqualifications declared.

The first recognized dog show in England was that held at Newcastle in 1859. It had become a well-established institution there long before anything was done in this country; and when a start was made here, the originators on this side had the benefit of the long experience which seventeen years of the bench shows had given the managers in England. During that time a kind of bench-show literature had grown up, and the virtues and vices of breeding and judging for bench-show points had been discussed very thoroughly. The result of all this discussion has been that judging is now universally for points; that is, each structural feature has given to it a certain numerical value when perfect, and the judges so estimate each feature of each dog, and the dog having the highest number of points is counted the best. For instance, take the Pointer, and look at the standard set up for him when he is perfect in every respect:

Skull	10 points.
Nose	10 points.
Ears, eyes, and lips	4 points.
Neck	6 points.
Shoulders and chest	15 points.
Back, quarters, and stifles	15 points.
Legs, elbows, and hocks	12 points.
Feet	8 points.
Stern	5 points.
Coat	3 points.
Color	5 points.
Symmetry	7 points.
Total	100 points.

Any one familiar with the work which a Pointer is required to do in the field will see the wisdom of this apportionment in every regard perhaps except that of color, which probably might have been left out of the account entirely, and given over to the points apportioned for legs and feet. The Pointer must have great intelligence, great power of scent, must have great strength and speed, so as to do his work thoroughly and rapidly. The Pointer therefore structurally perfect according to the standard is very likely to excel in those qualities most required. As a matter of fact, which may be recorded here at once, the Pointers winning in the bench shows have as a rule in this country been most excellent performers in the field and at the field trials. It is usually expected that the dog that has won the best prizes in the shows will come out first in the trials, and this expectation has been more often realized than not. This is notably the case with Pointers in this country, but I am not prepared to say in an unqualified way that it is so of all other breeds.

The various authorities put the dogs of different breeding into groups formed usually according to the theory which each writer maintains. Frederic Cuvier, the brother of the more famous Baron Georges Cuvier, attempts to arrange the varieties under three primary divisions, which are founded upon the shape of the head and the length of the jaws, these being supposed by him to vary in accordance with the degree of cunning and scenting powers which the animal possessing them displays. These divisions Stonehenge, the authority highest considered by practical dog-fanciers, adopts except in a few trifling instances. The first of F. Cuvier's divisions he calls Matins; the second, Spaniels; and the third, House-dogs. In the first division belong (*a*) all half-reclaimed dogs hunting in packs—such as the Dingo, the Dhole, and the Pariah; (*b*) domesticated dogs, hunting in packs or singly, but using the eye in preference to the nose—as, for instance, the Albanian dog and Deer-hound; (*c*) domesticated dogs which hunt singly and almost entirely by the eye—such as the Greyhound. Dogs of this division are characterized by a more or less elongated head, parietal bones insensibly approaching each other, and condyles of the lower jaw placed in a horizontal line with the upper molar teeth.

The second division, Spaniels, he arranges in five groups: (*a*) Pastoral dogs, or such as are employed for domestic uses—such as the Shepherd's dog; (*b*) Water-dogs, which delight in swimming—such as the Newfoundland dog and Water-Spaniel; (*c*) Fowlers, which have an inclination to chase or point birds by scenting only and not killing—such as the Setter, Pointer, and Field-Spaniel; (*d*) Hounds, which hunt in packs and kill their game—such as the Fox-hound and the Harrier; (*e*) crossed breeds for sporting purposes—such as the Retriever. Dogs of this Spaniel division are characterized by moderately elongated heads; parietal bones not approaching each other above the temples, but diverging and swelling out so as to enlarge the forehead and cavity of the brain.

The third division, or House-dogs, are characterized by a more or less shortened muzzle, skull high, frontal sinuses considerable, condyle of the lower jaw extending above the line of the upper cheek teeth. The cranium is smaller in this division than in the first and second divisions, in consequence of its peculiar formation. All of these are placed in one group of Watch-dogs, which have no propensity to hunt, but are solely employed in the defence of man or his property—such as the Mastiff, the Bull-dog, and the Pug.

Stonehenge, while admitting that this grouping is founded on natural laws, points out some anomalies. He says: "The Greyhound is quite as ready to hunt in packs as any other hound, and is only prevented from doing so by the hand of his master. The same restraint keeps him from using his nose, or he could soon be nearly as good with that organ as with his eye." He also takes exception to the definition of Fowlers, "having an inclination to chase and point birds," whereas they often have as great, if not greater, inclination to chase hares and rabbits, and nothing but the strictest discipline restrains them.

Though this grouping has much to do with the standards by which each breed of dogs is judged at the bench shows, it is not necessarily considered in arranging the premium list, which is made out by each bench-show committee as it sees fit, the American Kennel Club only stipulating that the dogs shall be judged in classes which the club laws define. These are six in number—the miscellaneous class, the selling class, the novice class, the puppy class, the open class, and the challenge class. The challenge class is for all dogs having won four first prizes in the open classes. A dog having won three first prizes in this class has the privilege of the title of champion without further competition.

The definition of this class explains something very frequently puzzling to the uninitiated. One hears of the Champion Mastiff Homer for instance, and he is inclined to believe that this dog, in which Mr. Phœbus, of the Somerset Kennels, takes such a just pride, has been adjudged the best mastiff in the country. Though he may be that, his title of champion really has no more meaning than the rule above quoted implies, and on the list at present there are at least five other mastiffs bearing proudly the same misleading title. But any dog who wins the title according to the rules must be pretty nearly perfect, as he must get seven prizes in all, and three of them must be against dogs which have already won four first prizes in the open class. Very often, in the effort to achieve this high eminence, the owners resort to very keen strategy. The larger the show is, the harder it is, of course, to win a first prize against all comers. The exhibitor therefore is on the alert to get his dog where the competition will be less severe. Long journeys are frequently taken, and remote places visited, in the hope of scoring another winning. While such tactics may get the title at last, no exhibitor can ever be certain that there are not two or three others as clever as he working upon the same lines. It seldom happens that such a thing can be accomplished without many disappointments, and while the title appreciates the value of the dog, however it may be won, they who are learned in bench-show annals know pretty accurately how much significance attaches to each winning. Very naturally a first prize from the Westminster Kennel Club is more highly valued than that from any other, though, of course, there have been instances where the competition has been greater at other shows than that held in Madison Square Garden.

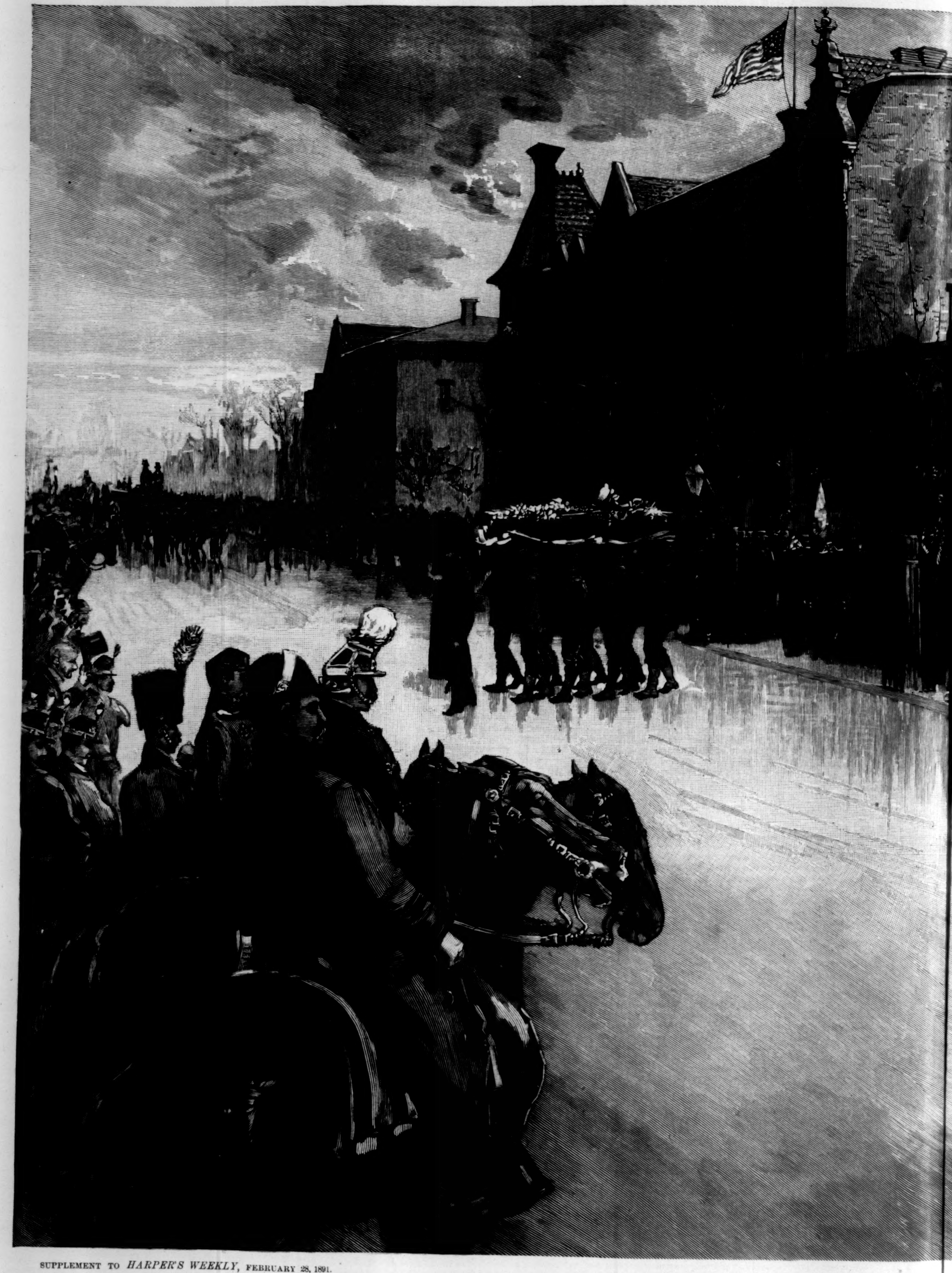
While each show makes its own programme, subject to the general laws of the American Kennel Club, the specialty clubs determine upon the standard which the judges shall apply to the dogs exhibited. These specialty clubs number not less than twelve, and include organizations devoted to Fox-terriers, Beagles, Mastiffs, Pet Dogs, Spaniels, Chesapeake Bay Dogs, Collies, English Setters, German Mastiffs or Great Danes, Gordon Setters, Pointers, and St. Bernards. In most instances the standards vary slightly from those used in England; but that for the Pointer, as given in Stonehenge and above quoted, has been adopted by the Pointer Club in this country. These standards are meant, of course, to cover the points of a perfect dog in each of the breeds, and it is probable that they do it with as great nicety and precision as possible. There is, however, much contention as to whether the influence of breeding so as to come up to these standards has enhanced the usefulness of bench-show dogs in the special direction of ability to perform the work for which each is intended.

On this subject the dog writers differ somewhat, but not widely, and the prominent breeders in America, with one or two exceptions, unite in saying that the tendency of these contests is not only to keep pure the breeds, but to improve the animals. As has been said before, this is particularly so of sporting dogs. And as to other breeds, if their utility has not been enhanced, it has probably not been hindered, except where dogs have been suffered to go without training. If a breed of Pointers or Setters or Collies, for instance, is permitted to go generation after generation without being taught to do the work each is intended to do, there will soon be a marked deterioration in the offspring. In this country there is practically no work for some of these dogs to do, and it follows very naturally that while structurally they may show the proper points, the intelligence must be suffering for a lack of opportunity to exercise it. But the bench shows have nothing to do with this deterioration, unless they are culpable in giving prizes for dogs other than those which have a full field in this country to exercise the special faculties for which they are bred. On the other hand, nearly all of these dogs are very companionable fellows, and in their conduct display a loyal fidelity worthy of emulation.

Sporting dogs, such as Pointers and Setters, are those which are most generally employed in actual work in this country; and there is not a neighborhood in all the land in which several of these intelligent animals are not to be found, and therefore, more than any other breeds, these two are valuable for the actual services performed. The Pointer is related to the Hound, and is supposed to be derived from an old Spanish breed. It owes its name to its habit of standing fixed at the scent of game, and this, like the crouching of the Setter, whether due to long-continued training alone, or to the modification and exaggeration by man of the instinctive start of surprise common to all dogs when first aware of their prey, is now inherited, the puppy pointing before his training has begun. The strength of this pointing propensity was never more signally shown than in the case, told by Daniel, of two Pointers which stood immovable as statues during the hour and a quarter occupied in sketching them. Stonehenge says that the points desirable in the Pointer are "a moderately large head, with a high forehead and an intelligent eye of medium size. Muzzle broad, with its outline square in front. Flews manifestly present, but not pendent. The head should be well set on the neck, and the neck itself long, convex in its upper outline, without any tendency to a dewlap or to a ruff. The body of good length, with a strong loin, wide hips, and rather arched ribs, the chest being well let down, but not in a hatchet shape, as in the Greyhound, and the depth of the back ribs being proportionately greater than in that dog. The tail, or stern, as it is technically called, is strong at the root, but, suddenly diminishing, it becomes very fine, and then continues nearly of the same size to within two inches of the tip, when it goes off to a point, looking as sharp as the sting of a wasp, and giving the whole very much the appearance of that part of the insect, but magnified as a matter of course. This peculiar shape of the stern characterizes the breed, and its absence shows a cross with the Hound or some other dog. The shoulders are points of great importance in the Pointer, as unless they are well formed he cannot last throughout the day, and moreover he cannot stop himself or turn quickly in his work, as he ought to do. Hence a long, slanting, but muscular blade is of vast importance, united to a long upper arm, which again requires for its existence an elbow well let down below the chest, and a short forearm. Plenty of bone in the leg, well clothed with muscle and tendon, a strong knee, full-sized ankle, and round strong foot, provided with a thick sole, are also essentials to the wear and tear of the fore quarter, while the hind quarter requires muscular haunches and thighs, strong, well-bent stifles, large and strong hocks, and feet of the same character as described for the forefeet. The color should be principally white."

If any man ever knew what a good Pointer should be, it was Stonehenge, and therefore his description is here given in preference to any other. It has before been said that successful bench-show Pointers had proven to be excellent field dogs. Take, for instance, the celebrated dog Sensation, the splendid Pointer exhibited at the first show of the Westminster Kennel Club. He was a noted bench-show winner, both in England and in this country, and his performances in the field at trials were quite equal to his merits according to points. He was also the sire of winners on the bench and in the field. Croxteth is another illustration of an exactly similar nature. His sons Drake, Robert le Diable, Ossian, and many others are eminent field-trial performers, while he is considered by good judges to be the perfection of show form, and has won at all the principal shows in this country. Bang-Bang, now dead, was a phenomenal field dog, and had won first prizes at the Crystal Palace shows in England, and many firsts in this country, including the sweepstakes for best light-weight Pointer in 1884, which carried with it the title of "Champion of America." Duke of Hessen, the Pointer which ran second in the All-aged Setter and Pointer Stakes of the Eastern Field Trial Club, at High Point, North Carolina, last fall, had won first prize at the English Kennel Club's show before being brought to this country, while since arriving here he has won first in New York in 1887, first in Boston, Philadelphia, and Chicago in 1889, and first in Boston in 1890. Graphic, Lad of Bow, and Lass of Bow, all champions of record at bench shows, were excellent working dogs, and have each run with credit at the different field trials in this country.

The Setter is preferred above the Pointer by some sportsmen. He takes his name from the crouching attitude he assumes when he has scented game. Darwin suggests that this habit is "merely the exaggerated pause of an animal about to spring upon its prey." Stonehenge, however, says that the Setter originated before shooting on the wing became common, and the crouching attitude was taught to him by the hunters, who threw a net over the covey the dog had found. But now that wing shooting is general, this crouching or "setting" is not considered the best method to be taught, as often the dog is lost to the sight of the gunner. Setters, which belong to the Spaniel group, are of three kinds—the English, Irish, and Gordon. The points of the English Setter may be described as follows: The skull is of peculiar character, not so heavy as that of the Pointer, and without the furrow and marked prominence of the occipital bone; it is narrow or of medium width between the ears, and should have a decided brow over the eyes. The nose should be long, and with width in harmony with skull, without any fulness under the eyes. There should be in the average dog four to four and one-half inches from the inner corner of the eyes to the end of the nose. Between the point and root of the nose there should be a slight depression, at all events there should be no fulness, and the eyebrows should rise sharply from it. The nostrils must be wide apart and large in the openings, the end of nose moist and cool. In all Setters the end of the nose should be black or dark liver-colored, except in whites or lemon and white; a pink nose in them may be pardoned. The jaws should be exactly equal in length. The ears should be hung well back and set low, of moderate length, and slightly rounded at the point. The lips are not so full and pendent as those of the Pointer, but at their angles there should be a slight fulness, not reaching quite to the extent of hanging. The eyes must be full of animation and of medium size, the best color being a rich brown, and they should be set with their angles straight across. The American standard attaches to the points just described a value of twenty out of a hundred for the full perfect Setter. The neck of the Setter should be long, and it should deepen as it approaches the shoulders, joining them in a graceful curve. The shoulders and chest should display liberty in all directions, with sloping deep shoulder-blades, and elbows well let down, and at an angle bringing the four legs well under the dog. The chest should be thin enough to allow the shoulders to lie flat and move with freedom. The weight should be distributed as evenly as possible between the forward and hind parts. The drop in the chest should be just back of the elbows, sloping upward toward the neck. Back of the play of shoulders the ribs should spring gradually to the middle, and then less-



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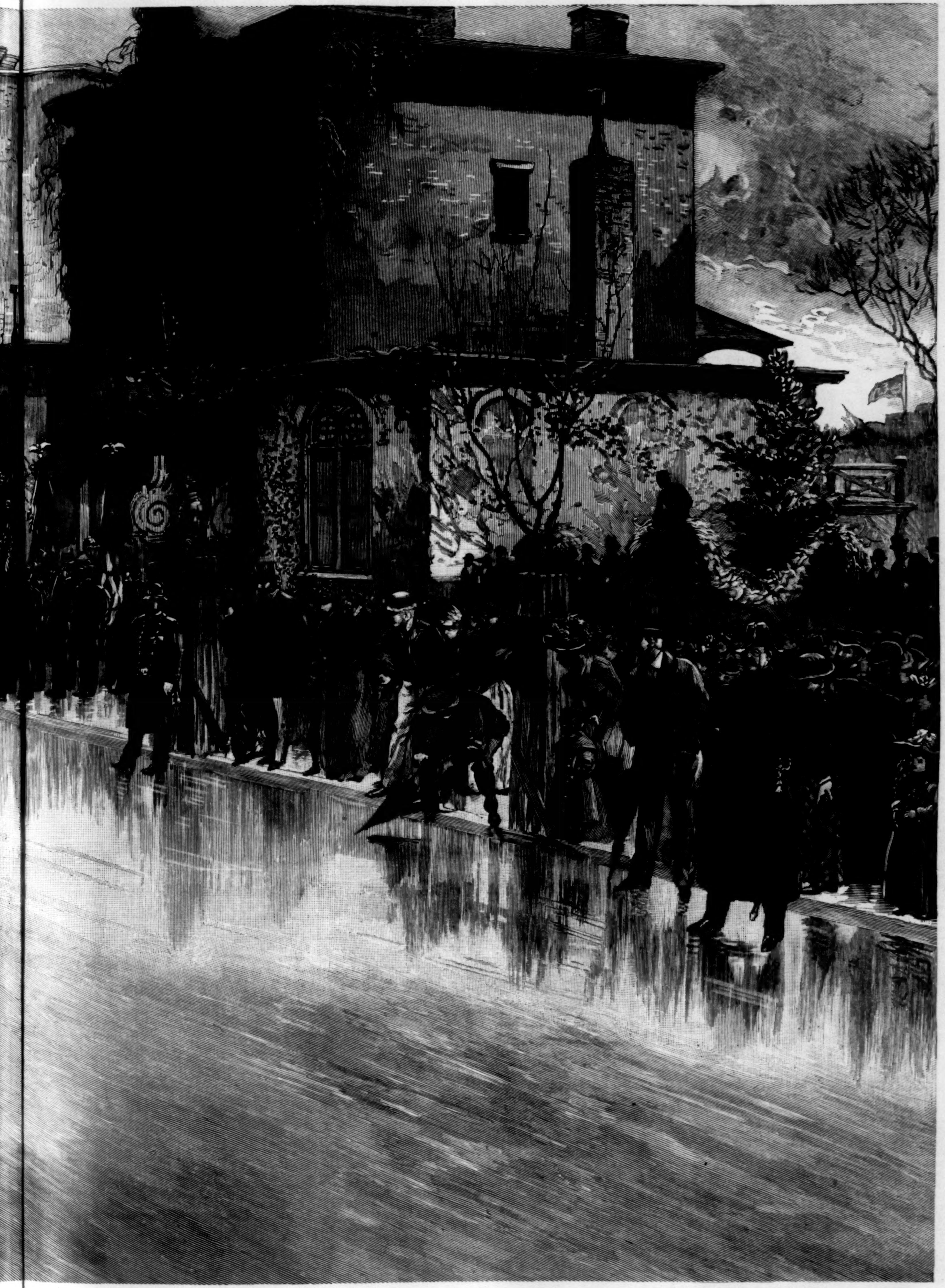

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S BEARING THE BODY FROM THE HOUSE.—DRAWN BY W. A. ROGERS.—[SEE PAGE 155.]

en gradually to the back rib, the greater the length from the shoulders to the last rib, and the greater the depth of the last rib, the better. An arched loin is desirable, though it should not be exaggerated. The stifles should be well bent and set wide apart. The elbows and toes, which generally go together, should be set straight; and if not, the "pigeon toe," or in-turned leg, is less objectionable than the out-turn. The arm should be muscular and the bone fully developed, with strong broad knees, short pasterns, of which the size in point of bone should be as great as possible, and their scope not exceeding a very slight deviation from a straight line. As to feet, they should be strong and serviceable. Some prefer the round cat foot, and some the hare foot with hair between the toes. Stonehenge prefers the latter, but the American standard says that either will do. The stern, or tail, should be carried straight, or with slight curve upward, either slightly above level of back, or down. There should be no curl; it should taper to a fine end, and reach the hocks. The feather should be composed of straight silky hairs, tapering to a point. The coat should be flat, with an absence of wave or curl. The feather should be considerable, and fringe the legs. Too much stress must not be put upon color, as all Setters, other than red or black and tans, are included in the class known as English Setters, and the color in this breed is largely a matter of fancy; some prefer black and white, or black, white, and tan, others lemon and white, and others again liver and white. Much importance is attached to the symmetry of the Setter, and the standard gives this a value of ten per cent.

The Gordon Setter is a black and tan, and takes its name from the fact that the Dukes of Richmond and Gordon long possessed a strain of that color. The points of the Gordon are very much the same as those of the English Setter. The skull, however, is a little heavier, the nose a trifle wider, the flag shorter, and the coat generally harder and coarser. The color is the great distinguishing feature. The black should be rich, without mixture with the tan, and the latter should be a rich mahogany red, without any tendency toward fawn. Stonehenge says that the original Gordons were black, tan, and white, but the bench shows disqualify all with other colors than black and tan. The red tan should be shown on lips, cheeks, throat, spot over the eyes, forelegs nearly to elbows, hind legs up to stifles, and on the under side of the flag, but not running into its hair.

There are two kinds of Irish Setters, "reds" and "white and reds," the former being preferred. The Irish differs from the English Setter in that its skull is somewhat larger and narrower, the nose a trifle longer, the ears are more tapering, and the frame higher on the leg.

In bench shows each of these Setters has a separate class, and there they do not come in competition. In field trials the English ranks first, the Irish second, and the Gordon third. That very successful field-trial English Setter Roderigo, and the sire of more field-trial dogs than any other, has been a first-prize winner at bench shows also. Roger, another English Setter, the winner of the Free-for-all Stakes at the Central Field Trial of 1889, is a noted bench-show winner. With Setters, as with Pointers, the best dogs in the shows are the best in the field.

As the Setter and Pointer are the most useful dogs to the American sportsman, the Collie is the most useful to the husbandman. He is a wolf-like animal, with erect or semi-erect ears, pointed nose, and shaggy covering. Buffon regarded him as the nearest approach to the primitive type of any of the domestic dogs. Other more recent authorities, however, hold that it is more reasonable to suppose that these points only indicate purity of breed, unalloyed by admixture with other varieties. The fact that his life is spent almost entirely out-of-doors, and that he has little or no opportunity of mixing with dogs other than of his own kind, would tend to preserve uniformity in external appearance, while his high cerebral development and intelligence prove beyond a doubt that the breed of Collies is one of the most highly improved, and in this respect remotest from the primitive type. His whole intellect is devoted to the one duty of tending his master's flocks, and in the performance of this he is equally sagacious, vigilant, and patient. At a word or even a look from his master he will gather the sheep, scattered for miles around, to one place. During and after snow-storms, to which Highland districts are so frequently exposed, the Collie is invaluable in saving his master's property from destruction. Without the Collie the Highlands of Scotland would be almost useless for sheep-farming purposes. The Ettrick Shepherd says that without the Collie "it would require more hands to manage a stock of sheep, gather them from the hills, force them into houses and folds, and drive them to markets, than the profits of the whole stock would be capable of maintaining." Darwin relates that the sheep-dog of South America lives on even more intimate terms with his charges than his prototype in Scotland. "When riding," said he, "it is a common thing to meet a large flock of sheep guarded by one or two dogs at a distance of some miles from any house or man." And on inquiry, he found out the method by which this friendship between dog and sheep had been established. The dog when a puppy is removed from its mother, and is no longer allowed to associate with other dogs, or even with the children of the family. It is kept in the sheep-pen, and suckled by a ewe. Generally, also, it is castrated, and thus has little or no community of feeling with its kind. Brought up among the sheep, it shows no desire to leave the flock, but assumes the position of leader. "It is amusing," says Darwin, "to observe, when approaching a flock, how the dog immediately advances, barking, and the sheep all close in his rear, as if round the oldest ram." It comes home daily for food, on receipt of which it returns to the flock; and this it is often taught to bring home in the evening.

The skull of the Collie should be quite flat and rather broad, with fine tapering muzzle of fair length, and mouth the least bit overshot; the eyes widely apart, almond-shaped, and obliquely set in the head; the skin of the head tightly drawn, with no folds at the corners of the mouth; the ears as small as possible, semi-erect when surprised or listening, at other times thrown back and buried in the ruff. The neck should be long, arched, and muscular; the shoulders also long, sloping, and fine at the withers; the chest deep and narrow in front, but of fair breadth behind the shoulders. The back should be short and level, with loin rather long, somewhat arched, and powerful. Brush should be long, "wi' upward curl" at the end, but normally carried low. The forelegs should be perfectly straight, with a fair amount of flat bone; the pasterns rather long, springy, and slightly lighter of bone than the rest of the leg; the foot with toes well arched and compact, soles very thick. The hind quarters, drooping slightly, should be very long from the hip bones to the hocks, which should be turned neither inward nor outward, and with stifles well bent. The hip bones should be wide, and rather ragged. The coat, except on legs and head, should be as abundant as possible; the outer coat straight, hard, and rather stiff; the under coat furry, and so dense that it would be hard to find the skin. The ruff and frill should be very full. There should be little feather on the forelegs, and none below the hocks on the hind legs.

There has been much discussion in times past in England and in this country as to the proper color for a Collie. When Collies became fashionable in England as toy dogs, the breed was more or less crossed with the Gordon Setter, and the coat of the offspring was nearly always a beautiful glossy black and tan. In bench shows this crossed breed is disqualified when found, and any indication of it counts against the contestant. The American standard says that the color of the Collie is immaterial. This is the description Burns gives of his own dog Luath:

> "He was a gash an' faithfu' tyke
> As ever lap a sheugh or dyke.
> His honest, sonsie, baws'nt face
> Ay gat him friends in ilka place.
> His breast was white, his towzie back
> Weel clad wi' coat o' glossy black;
> His gawcie tail, wi' upward curl,
> Hung o'er his hurdies wi' a swurl."

The most successful breeder of Collies in America, the master of the Chestnut Hill Kennels, admits that the breeding of these dogs for bench-show points has not in the least contributed to their utility. In England fashion has gone further than it has here, and one of the very best authorities, writing of the last show at the Crystal Palace, says: "Let us take a critical view of the Collies as a whole. Oh, what a falling off is there! Let those who have seen such dogs as Trefoil, Cockie, and Hero at their best conjure up their images, and compare them with those of to-day. Along the benches dog after dog would have been by judges, and would now by shepherds be declared a pretty toy, but as a Collie a weed. Many of the dogs and a large majority of the bitches are undersized weaklings that would be washed away in a mountain storm unless carried in the poke of the shepherd's plaid." This criticism of the English bench-show Collie was shown to one of the men best informed on this subject in this country, and he said that his observation of the tendency in England confirmed what has been quoted, but that as yet it did not apply here, though it is likely to be equally applicable in America in a short while if we do not sternly decline to imitate the faults of the English breeders.

One of the most popular dogs in this country is the Fox-terrier. There are many of them in all the various classes at the bench shows, and competition for prizes is always keen. He was originally bred and kept as an addition to every pack of Fox-hounds, being quick enough to be up in a very few minutes after running a fox to ground. Then the terrier would go to ground, and by his persistent snapping start the fox so that the chase could be resumed. Recently, however, the Fox-hound has become so fast that the Fox-terrier cannot keep up with a pack, and therefore he has to be carried on horseback. In this country, where real fox-hunting amounts to next to nothing, the Fox-terrier does not serve even this purpose. But he is a gentleman-like little fellow, and particularly companionable. His cleanliness and good-manners generally make him very acceptable as a dog to enjoy the privileges of the house, while his pluck, activity, and sprightliness command respect and admiration. As an exterminator of vermin he has no superior in the Terrier group. He should have a flat head, narrow between the eyes, but wider between the ears; these should be set rather back, but lie close to the cheek, and should be small and thin. The eyes should be small and keen; nose black; shoulders straight, but not too wide; chest full and round, but not deep; neck light, and coming gracefully out of the shoulder; back powerful, and thighs well bent and strong; legs and feet straight and strong; coat fine, but hard and silky. The weight should not exceed sixteen pounds, Stonehenge says, but the American standard places the maximum at four pounds higher. White should predominate in the color, with black-and-tan markings about the head. A year or so ago I saw in the menagerie at Central Park one of these beautiful little beasts chained in the same compartment with an immense elephant. They were evidently good friends in general, but the elephant, with an apparent sense of humor, kept dropping straw on the back of the terrier. At last his temper was aroused, and he rushed at his companion as though he would eat him up at once. The elephant got back as far as he could in the corner of the compartment, and seemed trying to make himself as small as possible. The dog tugged at his chain and growled angrily. I fancied that I saw a very broad smile on the elephant's face. Certainly there was humor enough in the situation to make anything not insensate laugh heartily. The Fox-terrier does not know what fear is, and this is mentioned merely as an illustration.

The Blood-hound is not a favorite in this country, and his disrepute is doubtless due to Mrs. Stowe and the imitators of the *Uncle Tom's Cabin* style of literature. A gentler or more tractable dog than the Blood-hound was never bred, and when he traces his victim he does not rend him limb from limb, as the flash stories we have read would lead us to believe. Mr. Edwin Brough, the most successful Blood-hound breeder in England, says that if a well-bred dog of this kind be kept as a companion and inseparable friend, the owner is likely to become a fanatic in favor of the breed. "Under these circumstances," he continues, "the hound's individuality is developed, and his capacity as a good comrade will be chiefly determined by the intelligence and fraternity of his human associate. He is essentially and pre-eminently a gentlemanly dog, and when you have once won his esteem, he may be depended upon as your stanch, trusty, and life-long friend. He has a solemn, stately bearing, and a thoughtful, ingenuous expression, which is quite in keeping with his stately birth."

Some time ago when the murders in Whitechapel, London, had baffled the efforts of the police to detect the guilty madman, Mr. Brough was asked to make some experiments with Blood-hounds. This he did. The result, though not satisfactory, convinced him that in a few generations of careful breeding from dogs trained to hunt the clean boot on a trail on hard ground or roads or pavements, the Blood-hound would be able in the most crowded thoroughfare to find the person he was sent in search of. There is only one kennel in this country in which the Blood-hound is bred, and that, singularly enough, considering the regard in which the dog is generally held and the memories the mention of his name recalls, is not in the South, but in Vermont. No bench-show committee could better define the points of a Blood-hound than Theseus did in a *Midsummer Night's Dream:*

> "My hounds are bred out of the Spartan kind,
> So flew'd, so sanded; and their heads are hung
> With ears that sweep away the morning dew;
> Crook-knee'd, and dew-lap'd like Thessalian bulls;
> Slow in pursuit, but match'd in mouth like bells,
> Each under each. A cry more tuneable
> Was never holla'd to, nor cheer'd with horn,
> In Crete, in Sparta, nor in Thessaly:
> Judge, when you hear."

These dogs went out of fashion a great many years ago, and they were not much thought of till the dog shows came to their rescue. A few old families in England, however, had kept the breed, and from these the noble beasts we now see are descended.

The Fox-hound has had expended upon him more care and attention in England during the past two or three centuries than any other dog, and the effect of all this is that he is now almost perfect, if not entirely so, for the purpose for which he is intended. Fox-hunting in the English sense has never found any firm foothold in this country, and therefore the Fox-hound is of minor importance among our various dogs. This hound is bred, however, and bred from carefully selected English strains. There are several packs kept in the neighborhood of New York, and though as a rule they do not find and chase a wild fox, the riding across country after an anise-seed bag is said by some to be as much sport as when a real and wily fox is afield and doing his best to baffle his pursuers.

The Harrier and the Beagle are also somewhat bred, and for each of these, prizes are offered at the bench shows. They are only miniature hounds, and for the same reasons that hounds are not in general use, these dogs are not.

The Mastiff is a fine noble-looking animal, and in temper is most to be depended on of all the large and powerful dogs, being extremely docile and companionable, though possessed of the highest courage. He has often been crossed with the Newfoundland and Blood-hound, and either cross is a dog of a very savage nature, while the pure breed will not on any provocation hurt a child or even a small dog. The most remarkable attribute of this breed is his fondness for affording protection. This dog is now being bred at many of the kennels, and it is pretty certain that if the breeders arrive at what the American standard calls for, this dog is likely to improve all the time. Stonehenge's points are, "a head of large size, between that of the Blood-hound and Bull-dog in shape, having the volume of muscle of the latter, with the flews and muzzle of the former, though, of course, not nearly so deep; the ear being of small size, but drooping like that of the hound. The teeth generally meet, but, if anything, there is a slight protuberance of the lower jaw, never being uncovered by the upper lip, like those of the Bull-dog; eye small. In shape there is considerable similarity to the hound, but much heavier; loin compact and powerful, and limbs strong; tail very slightly rough, and carried high over the back when excited; voice very deep and sonorous; coat smooth; color red or fawn and white—the latter mixture objected to." In the main these points coincide with the description promulgated by the American Mastiff Club. Farmers and country-folk generally who need watch-dogs should give attention to this variety.

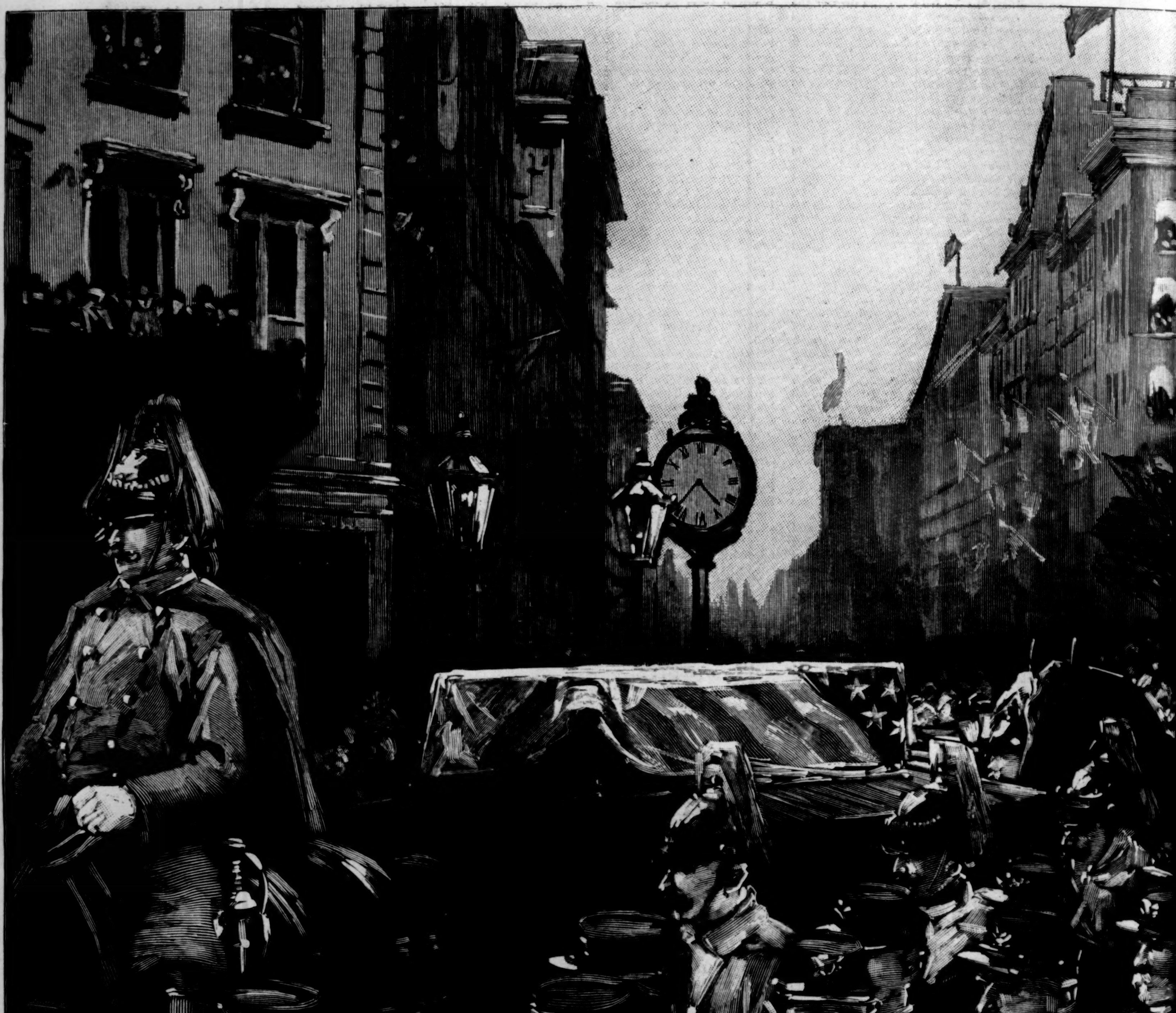
The St. Bernard dog is closely allied to the Mastiff, but resembles the Newfoundland in temper and in the disposition to fetch and carry. Every one is familiar with the wonderful stories told of the adventures of these dogs in the Alps. These dogs are bred at more than half a dozen kennels, most of them in Massachusetts, and the chief of them all being the Chequasset Kennel, Lancaster, Massachusetts. Of this kennel Miss Whitney is the proprietor, and she is so good an authority that the St. Bernard Club recommends her to bench-show committees as a proper person for a judge. Both varieties of this dog—the rough and the smooth—have amiable and kindly natures, and are very suitable for the companionship of women and children.

Next to the Blood-hound the Bull-dog is popularly looked upon as the most objectionable of the race. This dog is said to have little intelligence and no affection, and so distinguished an authority as Frederick Cuvier asserts this. Mr. John Gibson also adopts this view in his article in the *Encyclopædia Britannica.* It is essentially a fighting dog, and was formerly bred for the brutal sport of bull-baiting, in which its terrible obstinacy usually gave it the victory. It differs from other dogs in giving no warning of its attack by preliminary barking, and when it has once fixed its teeth in the object of its attack, no amount of torture will cause it to relax its hold. Colonel Hamilton Smith says that he has seen a Bull-dog pin down an American bison, and hold his nose to the ground till the animal brought forward its hind feet, and crushing the dog to death, tore his muzzle out of the fangs. Many dog-fanciers maintain that the Bull-dog is much wronged, not only by scientific authorities, but by common report. One of them says that he is as intelligent as other dogs, but has been permitted to do without education for so long that he does not learn quickly. Another says that the Bull-dog is blamed for all the wicked things which mongrels in which the bull predominates have done. Another, Mr. H. D. Kendall, of Lowell, Massachusetts, says: "The true Bull-dog is the kindest and most trustworthy of friends, and as a companion for children without an equal. Where it is impossible to keep a Mastiff, he is the best possible watch-dog. Few persons wish to keep a dog of such nasty temper that he will bite a stranger without provocation, but every one can feel that no person with a guilty conscience will intrude where the forbidding face of our friend the Bull-dog warns him to beware. As an exerter of moral influence he is without an equal in the canine world." Mr. James Mortimer also takes Mr. Kendall's view of the Bull-dog, and with both of these Stonehenge agrees.

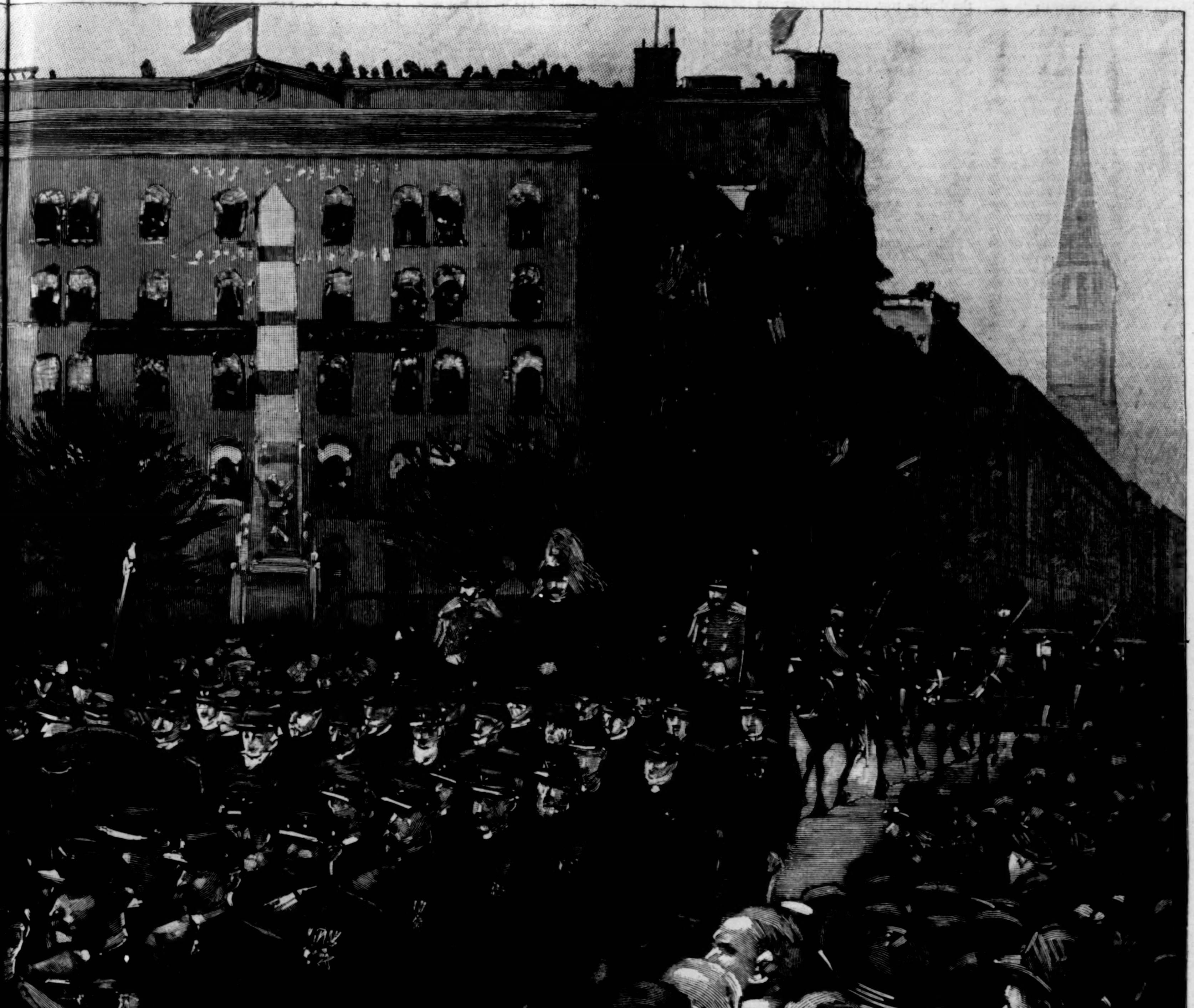
The Bull-terrier, a cross between the Bull-dog and the English Terrier, was originally bred for badger-hunting and for pit-fighting. Both of these brutal sports have gone out of fashion, and been prohibited by law in England and this country, and the occupation of the Bull-terrier is gone. He is bred somewhat, however, and is seen in the bench shows.

The toy dogs are almost too many to enumerate. The Pug and the Skye Terrier are probably the favorites, though Fox-terriers are now kept by many who formerly were content with these less active dogs. The French Poodle has also been given much attention. He is a wonderfully intelligent animal, and can learn almost anything which the master has patience to teach him. He is, without question, the best trick dog of all. The Dandie Dinmont, which was introduced to the general public so pleasantly by Sir Walter Scott in *Guy Mannering,* has not had much vogue in this country, but he is growing in favor.

Dog-breeding in America has attained the proportions of a large business, and all the breeders strive more or less to have their dogs come up to the bench-show standards. This is most praiseworthy, but unless these dogs, bred for perfection of conformation, be also educated and thoroughly trained, each to do the work for which nature intended him, the bench shows in the end will have accomplished only a small part of the purpose for which they were inaugurated.



THE FUNERAL OF GENERAL SHERMAN IN NEW YORK—THE GREAT PR



PROCESSION PASSING MADISON SQUARE.—Drawn by T. de Thulstrup.—[See Page 154.]

SHERMAN'S FUNERAL.

The last honors paid to the last American General in New York Thursday were most ambitious and splendid, but the result was hardly satisfactory. The funeral of General Grant excepted, New York never displayed such a strong desire to honor the memory of a soldier, but New York went home tired and disappointed. The display had not risen to the dignity of the occasion. The desire on the part of the military authorities was there, the men were there, the great mass of spectators was there, and made a living valley through which the pageant could pass. But the display was ill-arranged, the more imposing and striking features of the procession were kept to the last, until so late that only a single row of spectators remained to watch them file by in the twilight; and a function which should have been impressive was rendered monotonous. On an occasion of this singular importance the people who were so willing, and who came in such great masses and from such great distances, could have been given a spectacle which they would have remembered and spoken of with awe. The militia and West Point cadets should have first satiated the eyes of the spectators with the dignity of their bearing and the completeness of their appearance. But instead of this the long column of the G.A.R. was allowed to occupy the better part of the afternoon in passing a given point.

And though no others deserved more fitly a place behind the great commander, the more brilliant soldiery would have added more to the dignity of the pageant, and better satisfied the thousands who turned away wearied when they should have been impressed.

The Tuesday and Wednesday before the funeral, General Sherman's family yielded to the pressure of the thousands anxious to see the hero of Atlanta, and opened the doors of the house in Seventy-first Street where the General died, and where his body lay in a flag-draped casket. The first day few people heard of the opportunity, and not more than a thousand passed the doors. But the second day the line extended along the block, turned the corner, and ended half-way to Seventy-second Street. All day long until almost dark an unbroken stream of people, school boys and girls, old men and old women, rich men and beggars, passed through the dimly lighted parlors and looked upon the face of the dead man.

General Sherman's face looked very natural in the pale light from the seven-branched candelabrum at the head of the coffin. It was the same strong, stern face that is so familiar to the American people. He was in the full uniform of his rank, and upon the end of the coffin lay his dress sword and scabbard crossed, with his General's hat laid upon them. The second day a big bunch of violets lay upon the glass of the coffin. Just behind the candelabrum was a large pillow of violets sent by the widow of Admiral Porter. In the midst of her own great sorrow she had not forgotten the sorrow of others. Near it was a great design of lilies and roses sent by the President of the United States. Against the walls on all sides there were banks of flowers and palms and evergreens sent by friends and admirers in all parts of the country.

Early Thursday morning the signs of the great ceremonial that was to occur in the afternoon were apparent blocks away from the house in every direction. The people came first, and thronged all the avenues of approach so densely that the later-arriving military could scarcely form.

The parlors were so small that only a few scores of people were admitted to them. When the coffin, borne by soldiers, at last appeared, all there and in the street took off their hats, while the military presented arms. Then came the pall-bearers, as follows: Major-General Schofield, Major General Howard, Rear-Admiral Braine, Rear-Admiral Green, Professor H. L. Kendrick, General Joseph E. Johnston, Major-General Slocum, Major-General Sickles, Major-General Dodge, Major-General Corse, Major-General Swayne, Major-General Woodford.

Following these came the mourners—the son and the daughters, the long train of relatives from Ohio and other Western States, for the Sherman connection is large. When the six sergeants who bore the coffin had placed it upon the caisson, the escort of honor from the Lafayette Post of the G.A.R. formed on either side. Then the column began to move. Before the caisson a great coal-black charger was led. He had upon his back the boots, the spurs, the saddle, the pistols, and the sword of General Sherman. Following the caisson were the carriages containing the relatives. Then came the carriages with the distinguished persons attending the funeral. In these carriages people along the route recognized a score of men whose faces are known in every part of the United States, and a score more who are known by reputation. There were the President, his cabinet, ex-President Hayes, ex-President Cleveland, prominent Senators and members of Congress, the Governor of New York, distinguished officers of the army and navy, men who made national reputations under the immortal three, of whom Sherman is the last to die.

Two features of the parade were especially noticeable: one was the fact that with but one or two exceptions the men in the crowd did not uncover as the coffin passed between the double row, and the other was the subdued but quite conspicuous cheering and applause which greeted ex-President Grover Cleveland as he rode past. He was the only distinguished personage in the procession so signalled out and honored.

After the carriages came the thousands upon thousands of the Grand Army, the Loyal Legion, the National Guard, and other organizations. All along the line of march flags were flying at half-mast, buildings were decorated with black, people filled the sidewalks and pressed far out into the street, leaving but a narrow alley, through which the procession passed.

It took its way through the great avenues of the city, with the led-horse ahead, the solemn strains of music, the glitter and pomp of military and naval uniforms, the splendor of the lines of gray-haired veterans, who will so soon follow their leader into the grave; with the funeral flags floating above, and the sad music marking the march of ten thousand and more.

At the ferry the procession disbanded, and the remains started on the journey to St. Louis in the funeral train with the military escort and the family and relatives. As the train left Jersey City the cannon were still booming, and the bells of Jersey City churches were tolling. There were few stops made on the way to St. Louis, but at every station of size the G.A.R. posts and the people were assembled. There were firing of guns and rolling of drums as the train passed by. Each village and each city was draped in mourning, and the half-masted flags could be seen from afar. The train moved through a country that was filled with sadness at the loss of the dead man, and anxious to pay all honor to his memory.

In St. Louis the demonstration was such a one as that city had never seen before. The old General's sentiments regarding the war were well known, and as he had wished it in life, he found it in death. Sectional feeling was not known in paying honor to the man. He was borne to his grave with all the ceremony and all the feeling that the last of the Generals of the Republic deserved.

AN OUTLINE IN UMBER.

The mail had just come in, and the leather bag which held it lay on the counter of Joel Shattuc's store in a tan-colored heap, the limpness of which suggested only an elemental notion of contents.

Joel Shattuc himself, a middle-aged man with a square-looking head, which fitted into his body like a plug of pine, stood fingering the metal clamps across the sack's upper edge, his heavy face expressive of a settled gloom.

"Ef this thing goes on," he said, glancing toward a group of men in the space about the stove, "I don't know but I'll hev to give up my job." And as he spoke his eyes returned to the mail-sack.

"I wouldn't feel thet ways, Uncle Joel," moderately advised an elderly man huddled on a molasses barrel, his booted legs crossed, his chin braced from contact with a blue cotton shirt by a lath-like section of stiff gray beard.

"Oh, you wouldn't!" demurred Mr. Shattuc, a suspiciously satiric quality in his voice—"you wouldn't, hunk? Well, the thing of it is, Jake, I don't gen'ally regerlate myse'f on other men's notiouts. I say agin, I turn right oneasy in my stomach ev'y last time this yar sack gits pitched out of number ten—I do for a fack. I'm that plumb shore thar won't be nare thing in it for the Swetts folks that I hain't skercely got the sand to open the bag. I feel like I want to leave it locked." He fetched the counter a smart rap with his shut fist, and glowered upon the other men, who at once assumed expressions indicating an intense interest in the stove—a small red-hot affair glimpsing on its devotees through three triangular openings, like a very ugly idol with a trio of terrible eyes.

"Well, for me," presently advanced the man on the barrel, "I don't look to get no mail to-day; but still, Uncle Joel, look like it's unly fair to the town ez thet sack ought to be ondid. 'S I say, I feel right with you'ns 'bout Sa' Jane Swett. D'law! I've knowed thet gyrl sence she wasn't no heftier than a right sizable terbaccer worm. But yit I don't reckon ez the world's goin' to quit jest cuz Sa' Jane's sot her mind on a man thet never showed her no special favor, no more'n bein' sort uh smiley an' sof'-spoken, like he was to ev'y person." He cleared his throat, and added: "'Tain't right good jedgement to do us out'n the mail 'cuz Sa' Jane's beau—ef you want to call him thet—hev went plumb back on her."

Mr. Shattuc's eyes, which were gray and had a shifting movement under his brows as of two steel shuttles, observed the other man with an ominous and unusual steadiness. "Ef any man 'lows to question my jedgement," he began, in a tentative voice, "he'll find hisself tacklin' the biggest contract—"

"D'law! yes," broke in the object of this, with a deprecatory burst of mirth, which, while it spread his lean cheeks in a wide smile, left his eyes free to observe any tendency of the postmaster's hand toward a hip pocket. "Thet's so, Uncle Joel. You do beat the Jews for jedgement! Yes, sirs"—turning to the rest of the men, who were taking in the controversy with the abstraction of countenance which indicates a stern intention of neutrality—"I've always helt thet Uncle Joel Shattuc kin down any man in the district for common hoss-sense an' natchel wit. I honor you, Uncle Joel, for being slack about openin' thet yar bag. I got daughters my own se'f, an' I'd hate to see arr one of 'em lookin' like a lightnin'-rod thoo pinin' to git word of some un 'r uther."

He drew up rather suddenly. The door had opened with a warning click, and a woman stepped across the threshold, her slender young figure revealed with an effect of intense fragility against the oak-crowned knob behind her. A dwindling strand of yellowish hair strayed across one pale cheek, and some loose short locks lay on her brows above the sad intentness of wide, soft eyes brimming with the pathetic violet of autumn distances. A gaudy plaid shawl canopied her head, and as she drew near the counter and saw the mail-sack lying unopened upon it, her hands gave a nervous flutter, and the shawl fell over her shoulders.

"Mail not handed out yet?" she said, with a piteous affectation of carelessness. "I'm sort of early. I didn't keer much about comin' down to day, but maw she hed a sort of feelin' thet maybe her folks down in Russell County might have sent word."

She leaned against the counter with an air of weariness, her slenderness, her heavy yellow hair, and tiny, sharply marked freckles giving her the look of a cowslip bending a little on its long stem.

"Yes, yes," said Mr. Shattuc, diving for a key attached below the counter by means of a long chain; "I'm late to-day. Look like these fellers git in hyar and talk till I am 'bout run destracted. Set down, Sa' Jane. I'll run thoo the sack in half a minute now. You Mart Lype, give Miss Swett that yar chair."

At this Mart Lype, a lazy-looking young man, with low brows thatched in black hair, and a bronze throat girt in a scarlet handkerchief, tilted himself forward.

"Will you set, Miss Swett?" he questioned, without insistence.

The girl shook her head. "I ruther stand up," she murmured, hungrily eying the postmaster as he shuffled several newspapers in Manila wrappers. There were only two letters. These Mr. Shattuc avoided as if their whiteness suggested leprosy to his mind. He had a definite idea that neither of them was for Sarah Jane Swett, and he felt himself a poltroon and coward when he thought of turning up the enclosures.

"Jest wait a minute," he muttered; "be back direckly."

He took a couple of strides, and disappeared through a door at his left. When he came back his face wore a look of defiant assurance, and some amberish drops hung in his beard.

"'Mr. Rube Hughes,'" he announced, in a voice of challenge, picking up the first letter. "Hyar yar, Rube. Reckon it's from thet gyrl o' yourn down in Liberty." Then he took up the second envelope, and his hand visibly shook. "This-un's from your kin in Bracken, Mart," he said, and cast the letter into the black-browed youth's hands.

The girl facing him did not move. One slight wrist lay along the dark wood, and her brown fingers clutched at the sharp edge as if it were a plank to which she clung as the waters of disappointment went over her.

"Uncle Joel," she faltered, in a husky tone, "I—you—you don't ever leave no mail stuck eenside the sack, do you?"

As she said this she smiled at him with a pitiful kind of coquetry in her pretty pallid face.

"Lord, no, Sa' Jane!" exclaimed the postmaster. "I never—"

"I know! I know!" she cut in, with a broken sort of laugh; "but look like the bottom of thet bag stands up like they might be."

Mr. Shattuc took the sack by its bottom ridge and shook it. "You see?" he said, with a sort of gloomy pride.

She gathered her shawl about her head without a word, and turned and went out, and the door clanged behind her.

The man on the barrel observed the hairy back of his hand with an air of impartial criticism. "I'd put my hull terbaccer crop on it thet she won't never hear arr word of Jim Crawford agin." He said this slowly.

Mart Lype laughed, his booted legs waving in the air as he tilted himself back against the wall. "Jim, he was a great one," he commented; "fine-lookin' feller, Jim. Always got me thet he ever paid 'tentions to Sa' Jane; nothin' to look at, Sa' Jane ain't."

"You don't know no more 'bout looks then a tadpole does about honey," argued the postmaster. "Sa' Jane's a good-lookin' gyrl an' a good gyrl. Too good for Jim Crawford, curnfounded young rooster! I wisht he never showed his face hereabouts, turnin' gyrls' heads with his high-colored neckties and fine talk. 'Cuz he happened to run the engine from here to Waynesville, he jest natchelly 'peared to set hisse'f cl'ar up over country boys." He wiped his brows. "Whar-at did he go from here? Blame ef I don't feel like writin' him a piece of my mind."

The man on the barrel gave a cluck of approval. "Firs' trate idy," he commented, slapping his knee. "'Tis so. Say, uncle, jest you write 'n' tell him what Casey County thinks of a feller like him. Go on, uncle!"

"Blame ef I don't feel like it," mused Mr. Shattuc, bewildered and charmed with the success of his notion. "Any one know whar a letter 'd reach him? He got a run on the Queen 'n' Crescent, didn't he? Look like I got the idy off'n some o' you boys." He glanced at the others with challenge in his eye.

"Reckon 'twas me named it," admitted Mart Lype, cutting a casing of dry mud from his boot sole with a jack-knife. "Yes, I 'low I told you. He got a run to Nashville, I believe; three months ago come nex' Chuesdy. Heh! Day he left, him and me was takin' somethin' together, man and man, and Jim he says—sof'-spoken feller, Jim—'Mart,' he says, 'I'm kinduh sorry I'm leavin' this town,' he says, 'and yit kinduh glad. I'm a gre't favoryte on Deadwood,' says he. 'Folks here is jest my style, but I'm kinduh 'fear'd Sa' Jane Swett's gittin' too—well, it's this way: she likes me mighty well, Sa' Jane does, and I'm a sof'-hearted 'coon, I am. D'know but I'd ask her to set the day ef I ketched her lookin' at me the ways she does sometimes out'n them big eyes—can't tell. I'm a soft'-hearted feller, Mart.'

"'Well,' says I, 'ef you like her so well, why don't you ast her to hev you? She's a right sweet gyrl, Sa' Jane is.'

"'Uck-uh,' says Jim; 'my wife's got to be eddercated and book-l'arned,' says he. 'I look high, Mart; my wife's got to know how to read 'n' write. No, Mart,' he says; 'I best take this new run. Sa' Jane she'll fergit me arter a spell. Nice gyrl, Sa' Jane, but not eddercated.'"

Mr. Shattuc came down on this narrative with a sound remarkably like an oath. "I'm goin' to write that letter," he roared, "ef it's the last lick I put in on top o' yearth! Whar-at's thet pen used to be round hyar? I'm goin' to tell thet set-up young calf of a engineer what plain folks thet eats fat meat the year round thinks of him! 'Eddercated' nothin'! Sa' Jane was eddercated enough to know when she was bein' made love to, I reckon. A woman don't need no more l'arnin' then thet."

The letter thus projected was not, however, finished in so short order as the heated state of its author's feelings would seem to promise. Mr. Shattuc's spiritual forces had to work against the material resistance of an unaccustomed hand, thick ink, and a pen weighted with the rust of years. It was, accordingly, a day or so before the matter was brought to completion, and the postmaster found himself in the proud position of reading aloud to his friends the letter which was to bear to Jim Crawford the impartial expression of his former neighbors' opinion of him.

"J. Crawferd"—so the paper began—"Me and some of the folks down here that knows you want you should know you Better not show yoursef round here no more lest you want to find what plane folks thinks about Rasculs and skampes if we got you Ded wrong none of us but what wantes to do thee square by you Miss Swett she thinks rite smart of you why haint you rote to Her I am sick of my job becus no mail dont come for Miss Swett if a letter was to come for Miss Swett Me and the others woud be Mity proud to change our Hidy of you Rite soon yours truely Joel Shattuc Postmaster and Others."

"I'm goin' to stick it in a invelup," said Mr. Shattuc, to carry off his embarrassed appreciation of the applause which greeted this effort, "and back it like this: 'J. Crawferd Engineer care Queen & Crescen' railroad C'mp.y ple's hand to Party address Onbeknown.'"

In this wise the letter was sent its way, and the town had a period of breathless expectancy as to its probable results. On the sixth day after its sending, a large envelope, with some printing across one end, fell out of the mail-sack, addressed in type-writer characters to Joel Shattuc.

"Boys," said the postmaster, solemnly, "it's come! This is it, 'y gum! from the general office. Hyar, you folks"—addressing a gaping throng of children sent for the mail—"git along home! Mail won't be distriberted till 'long todes night. I'm busy. Cl'ar out!"

He set a ponderous pair of spectacles on the bridge of his nose, which closed upon the wire-like small toothless jaws. It was apparently quite a short letter, yet the matter of it seemed strangely forcible, for those who watched the postmaster observed that his mouth opened and hung lax as he read, and that his hands jerked as he held the paper close, and then at arm's-length, as if he strove to focus his reasoning powers.

"Lord God ha' mercy!" he gasped, taking the sweat from his temples with the ball of his hand. "Listen at this:

"'*Joel Shattuc:*

"'Dear Sir,—We regret to say James Crawford was killed nine weeks ago in a wreck near Bolingsville, Tennessee. Remains shipped to his mother at Sadiesville, Kentucky.'"

There was only a moment of aghast silence. The shadow of the young fellow whose end was thus briefly chronicled seemed to fill the low smoky room, where he had been used to lounge of nights with the men now called on to realize their own doom in his tragic taking off.

Suddenly, in an appalled whisper, Mart Lyfe spoke: "Hyar comes Sa' Jane Swett down the hill. Lord! I— What you goin' to tell her, uncle? Let me git out'n hyar. I—"

Mr. Shattuc steadied himself against a box of patent medicine—a pain-killer concoction, the gayly backed bottles of which glimpsed at him with a certain airy scorn, as if they knew their futility and rejoiced in it.

Sarah Jane Swett came into the store a little more rapidly than usual, a bright color in her hollow cheeks from the biting wind.

"I'm kinduh late," she murmured, pushing back the dense yellow hair about her eager face. "I didn't know but they might be somethin' to-day."

The postmaster looked straight over her head at the men beyond. "I'd like for y' all to onderstand," he said, decisively, "thet my store hain't no place for loafin'. I want you fellers to cl'ar plumb out'n hyar. I got work to 'tend to."

There was a marked alacrity in the manner in which the postmaster's friends responded to this command.

When the porch had sounded to the last tread, Mr. Shattuc held out the lately received letter.

"Sa' Jane," he faltered—"Sa' Jane, kin you read writin'?"

"I kin git the sense of it."

"Kin you, Sa' Jane? Well, you study over this yar. I—. Mebby I hain't got it straight. I'll be back in a minute."

He disappeared in the doorway hard by. When he came back, brushing a hand across his mouth, he saw that Sarah Jane was standing precisely as he had left her, her face unmoved, the sheet still lying in her palm.

"She hain't made it out!" he groaned. "Oh Lord, I'll hev to tell her! "Sa' Jane, you—you hain't—you hain't—"

The girl lifted her eyes, letting them range over his perturbed face before they settled restfully back on the page. Her expression was absolutely tranquil. The strained anxiety which had made her features piteous was altogether blotted out, and her fallen eyelids hung heavy, as with some inexplicable rapture. They were like white flowers languid with the rich luxury of June.

"Sa' Jane, that yar letter," muttered the postmaster, feeling his knees in weak conjunction. "I reckon I best read it to you, Sa' Jane." He reached for it, but she laid it against her breast, covering it with both hands, protecting it with a lifted face.

"I've made it out," she said. "Jim's dead. He's dead, Jim is." Her lips shook. "Thar's folks 'lowed he wasn't true," she whispered; "and when he never wrote—God—God forgive me!—I—I—once or twice —I misdoubted if he loved me like I loved him!" Eva Wilder McGlasson.

PORTER'S FUNERAL.

While the last General of the American army lay dead in his home in New York, the last Admiral of the American navy was borne to his grave in the Arlington Cemetery at Washington. That city had not presented such universal signs of sorrow since the funeral of General Sheridan. For, aside from his eminent services to his country, Admiral Porter was beloved for his private virtues. The government buildings were draped in black. The shops and business houses flew flags at half-mast. Business was almost suspended, and, despite the threatening sky, the people thronged the streets, massed densely about the old brown-stone mansion, and pressed closely upon either side of the funeral procession.

Like General Sherman, Admiral Porter left instructions that his body should not lie in state. From twelve until one o'clock the day of the funeral a few people were admitted to the large parlor, cleared of furniture, where the Admiral lay. Then the doors were closed, and for a while Mrs. Porter and the family were left alone with their dead. In the streets in front of the house there was a great gathering of military, marines, and sailors drawn up ready for the march. Outside of this were the people whose numbers even a drenching rain did not decrease. The police cleared the way for the carriages for the few distinguished people who were admitted to the services.

The body of the Admiral lay in a casket covered with royal purple velvet, and ornamented with silver plates and handles. A plate upon the lid bore this inscription:

DAVID D. PORTER,
Admiral United States Navy.
Born June 18, 1813,
Died February 13, 1891.

At the foot of the casket stood a marine, and splendid floral pieces were piled all about him. The first floor of the Porter home is so arranged that all the rooms can be thrown together. On this day those rooms were crowded, and the wide porches also, where the naval officers in full uniform were grouped. Near the coffin sat the widow and her children. Opposite the coffin were the President, the Vice-President, the cabinet officers, the English minister, the German minister, the Chinese minister, and nearly all the members of the diplomatic corps. The Episcopal service was read, and then the procession began.

The pall-bearers were Vice-President Morton, Senator Manderson, Senator McPherson, Senator Hawley, Governor Pattison of Pennsylvania, Major-General Schofield, Rear-Admiral Rodgers, Rear-Admiral Howell, Rear-Admiral Crosby, Rear-Admiral Stevens, Rear-Admiral Almy, Rear-Admiral Worden, Rear-Admiral Jouett, Rear-Admiral Queen, Congressman Boutelle, and General Joseph E. Johnston. General Johnston was a warm friend of the Admiral, to whom the war was a thing of the past. The pall-bearers led the way out while the choristers were still chanting. The casket was borne by sailors. Outside, the marines were drawn up in a double line, and presented arms as the coffin and the mourners passed.

The procession itself was long, and made a most impressive display. Mounted police, followed by the Marine Band playing a funeral dirge, led it. Then there were the marine battalion, United States regulars—artillery, cavalry, and infantry—the National Guard of the District of Columbia, Grand Army posts; last came the hearse drawn by four horses, with sailors marching on either side. Then followed the mourners, and the President and high government officers, and the pall-bearers. There were nearly four thousand of the guard of honor which preceded the hearse.

The line of march through Pennsylvania Avenue was between packed sidewalks with black-draped buildings above, flags flying at half-mast from all of them. Faintly could be heard the booming of saluting guns from the *Despatch*, lying in the Potomac.

When the body was placed near the grave, "Nearer, my God, to Thee" was played, drums rolled, a brief army service was read; then Mrs. Porter stepped forward and looked upon the lowering coffin. When the grave was filled, the marines fired three volleys, and then a bugler played "Lights out."

Up at the Brooklyn Navy-yard Rear-Admiral Braine fired at noon a salute of seventeen guns to the Admiral's flag. It is a solid blue background, with four white stars arranged as a diamond in the centre. It was raised to the mast-head of the *Vermont*. As the echo of the last gun died away, the flag was lowered and put away. This was the last time that an Admiral's flag will be flown for many a year.

WATER POLO.

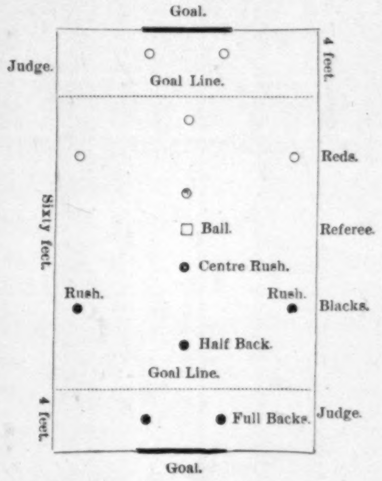
About two hundred years ago those of our English forefathers who loved sport, and were unable to indulge their fancies in the extravagance of polo pony and outfit, determined upon transporting the game to the water, a field that would be common property, and where the carrier required was not so expensive. In place of ponies they produced kegs, which the dear old boys straddled; for mallets they had a kind of paddle like a shinny stick, about six to eight feet long; and the ball was the prototype of that we now use. What rare good sport they must have had! Tub-racing is insipid and safe compared to sitting astride a bobbing, rolling cask, managing an unwieldy wooden paddle. Evidently, however, there was genuine merit in the sport, for it held full sway, so far as aquatic polo is concerned, and, indeed, is played abroad to-day, until about ten years ago, when in England our present game of water polo came first into being.

I have often wondered why, with all its mirth-provoking possibilities, none of our clubs has introduced the tub game in the summer programme, and I am glad to learn that such an attempt will be made the coming season off Travers Island by the New York Athletic Club. I predict the largest number of spectators the island has ever held if the effort is made. The game was first played in this country by the Boston Athletic Association in the fall of '89, and owes its development and success to the unceasing efforts of Mr. F. J. Wells, who is a member of the Boston and likewise of the New York Athletic clubs. Messrs. P. E. Morgan and Arnold Heilborn, of the Providence Swimming Club, were likewise pioneers in the sport over here, introducing the game at Providence, and doing much for its prosperous advance.

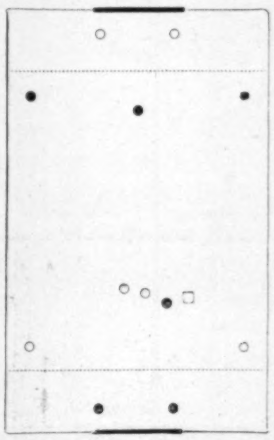
In this country the game is practically foot-ball in the water, but the English method of play is quite different from ours, being, in fact, to our water polo what the old Association foot-ball is to our college game of to-day. In the English style of water polo the ball is struck with the hands or pushed forward, and cannot be carried, nor is one player permitted to interfere with an opponent unless he is actually in contact with the ball. Our rules allow a player to throw or carry the ball in any direction, and permit of interference anywhere within three feet of the ball. The English game undoubtedly requires more speed and skill in swimming, but loses all opportunity for expert team-work that is possible in carrying and passing the ball. The English goal also differs from ours, for, instead of a board, they have posts four feet apart, and with a crossbar, under which the ball must be driven between the uprights. Our distance between goals, from sixty to seventy feet, remains the same as abroad, though the Manhattan Athletic Club has a swimming tank 100 feet long, the full length of which its team uses.

To a very large extent, the formation of our rules has been governed by the size of our tanks. In England, where such tanks are possible as the Lambeth Baths in London, that present a body of water 120×45, sport is greatly enhanced in permitting more out-playing. Inasmuch as a clear and intelligent description of this game has never been published, and because of the prospect of its becoming a fixture among the pursuits of sportsmen, I shall describe the game pretty fully for the benefit of those that wish to understand and play it.

The game is played by teams of six men, whose formation is somewhat similar to that of a foot-ball eleven. It consists of a centre rush, two side rushers (right and left ends), one half back, and two full backs, or goal-keepers. The teams, called reds and blacks, and wearing a distinguishing cap, line up, standing directly over or back of their goal. The referee in the centre holds the ball, awaiting the signal from the captains that all are ready. At the word "Go!" the ball is thrown into the centre, the men dive into the water, getting their positions, while the centre rush of each side, who should be the fastest swimmer of the team, makes for the ball with all speed—the positions when in the water being:



Whichever centre rush reaches the ball first snaps it back to the half back, while he and the two side rushers continue on to the opponents' goal. The rushers of the side failing to reach the ball pass on immediately to block the half back of the enemy, and the position now is:



The black half back endeavors to pass the ball down to whichever one of his three rushers is in the best position; and if he is successful the reds must hurry down to the aid of their goal-keepers, if it is found necessary. If unsuccessful, the black rushers are likely to be brought back to aid their own full backs. A goal is made then by touching the goal board with the ball, which must be forced through the enemy's line by the three forwards, supported by the half back, while the full backs remain in their own territory to protect their goal in case the ball should be lost to the other side. The most interesting point in the game, and where the greatest amount of skill is required, is when the ball is in play at the goal line or inside. It cannot be thrown to a player who is inside of his opponent's goal line; this would be off-side play. He must either swim across the line with it, or if it happens to have been thrown in, he can follow, at which time his own men join him, and the scrimmage to prevent a goal being made demands the greatest efforts and skill of the home full backs. The goal-keepers are really the most important men on the team, and must be active, cool, and strong. Certainly one of the best, if not the best, I have seen play is E. J. Kintner, of the N. Y. A. C. team. Undoubtedly the strongest centre rush playing is champion distance swimmer Meffert, of the M. A. C.

When the game was first played in this country there was no goal line distinction, and consequently immediately the ball was put in play the men all rushed to one opponent's goal, and the rough-and-tumble scrimmage that resulted upon the ball being thrown in was neither skilful nor interesting, there being absolutely no chance for expert play. Now the struggle on the goal line requires as much manœuvring and neat playing as does the tussle of the foot-ball half back to find an opening in the opposing forward. Indeed, the goal line rule of water polo formulated by Mr. Wells was patterned entirely after the foot-ball play.

The size of the tanks does not permit of many brilliant individual plays, and experience is proving daily that team-work is the one great essential. It is impossible to rely upon the fast swimming or strength of any one or two players, and captains will materially strengthen their teams by schooling them in cool play and strategic passing. There is ample opportunity for the cultivation and display of skill in this direction, but men must be able to act quickly, for a moment's hesitation brings the opposing forwards on him, and down he goes to the bottom of the tank. There is an abundant opportunity for "foxy" playing, such as sinking to the bottom with the ball, and swimming under the surface toward the opponents' goal, or of secreting the ball between the legs or in one hand, and swimming off with it nonchalantly to outwit the enemy's full backs. A player must be extremely quick and cool, however, for with the development of the game the difficulty of losing the ball is becoming greater. Thus far there has been no great advancement in skilful team tactics, due, of course, to the fact that every energy has been directed to mastering the rudiments of the sport. When the men have become proficient, and captains begin to cudgel their brains for puzzling team plays, there is no reason why water polo should not grow tremendously in popularity and interest.

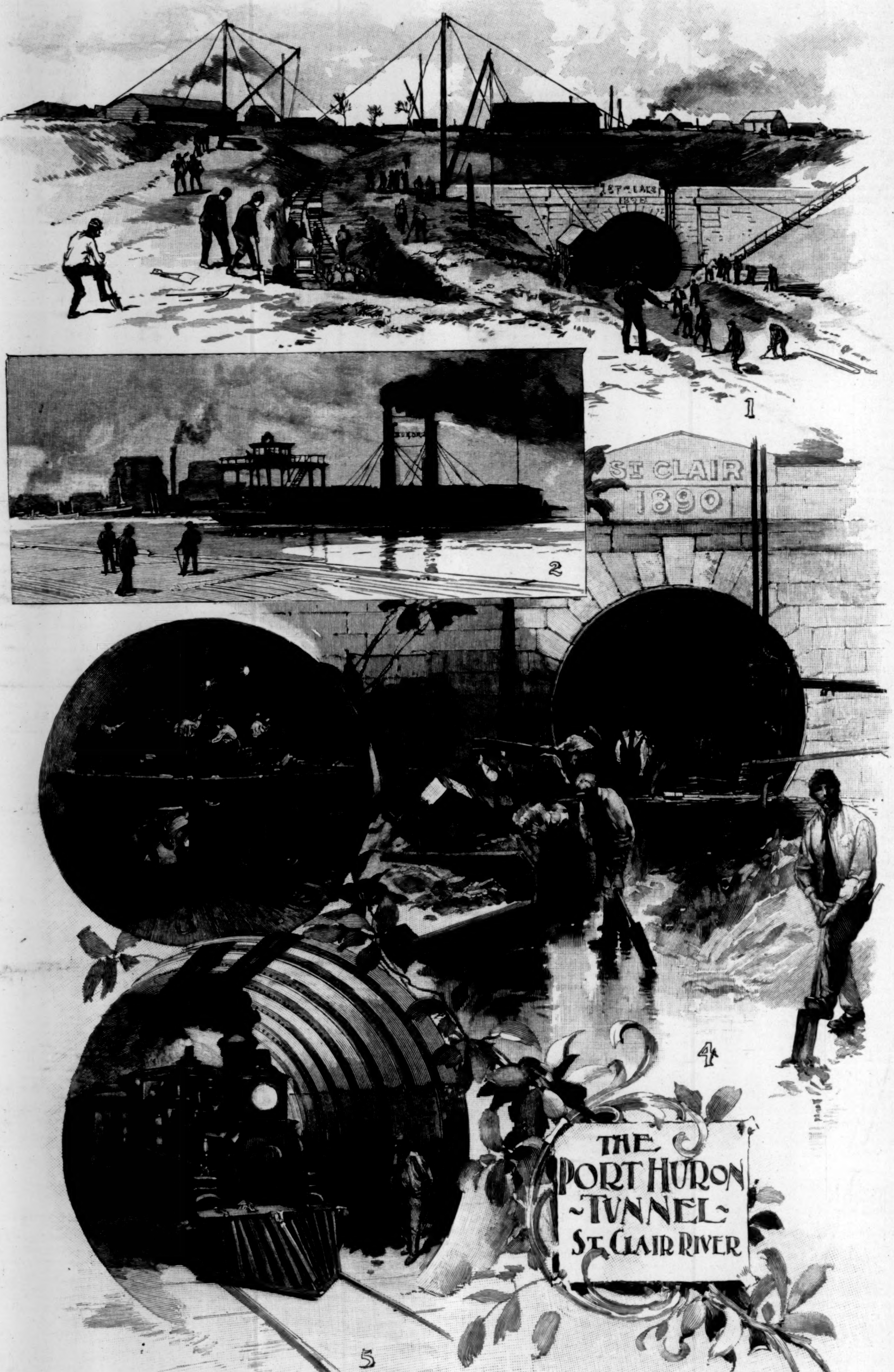
To the team player in training the best preparation is that which strengthens lung power and endurance. Continued immersion in the water draws heavily on a man's strength, vitality, and weight, and a corresponding increase of tissue-making food is required to counteract it; therefore eat plentifully of good plain food. A player that has once attained good form will suffer no ill effects from a hard-fought battle of twenty minutes. The first series of match games ever played in this country was between the Boston A. A. and Providence Swimming Club teams in the season of '89–90, the latter winning two of the three games and the championship. This season Mr. Wells introduced the game at the New York Athletic Club, and has worked indefatigably to make the team expert. It is due to his labors entirely that they have reached their present excellent condition. The Manhattan A. C. organized a team shortly afterward, and though not having the benefit of so experienced and skilled a coach as Mr. Wells, they have made good progress, and especially so in the past couple weeks. The game is about to be started, I hear, at the Columbia A. C., in Washington, and at the Denver Athletic Club. Wherever introduced it has been enthusiastically received, and there is no reason why it should not grow in favor until we shall have some large tanks, as abroad, constructed for it especially, and hold annual championship contests. Indeed, just now the matter is being agitated to form a league next year, such as exists in England, and play a series of games for the championship of the United States. At an early date a meeting of delegates from clubs interested will be held to revise and possibly improve the present rules, which were framed without the basis of experience, and are therefore incomplete in some respects.

It has been suggested that the game be played in the waters about the summer homes of our athletic clubs. The Columbia, New York, New Jersey, have exceptional facilities for such a venture, as will also the Manhattan A. C. It is a serious question in my mind, however, as to whether it would be possible to carry out such a scheme. In the first place, the swallowing of salt-water would sicken the player, and the possibility of drowning would not be inconsiderable. It is no uncommon occurrence for a man to be pretty well exhausted, and deep water is not a place of safety for such as these. The following rules are the latest revised:

RULES.

1. The ball to be an Association foot-ball (No. 3), not less than 8 and not more than 9 inches in diameter.
2. The goals to be boards about 4 feet long and 12 inches wide, marked GOAL in large letters, one to be placed at either end of tank, about 18 inches above water-line.
3. To score a goal the board must be touched by the ball in the hand of an opposing player, and the greatest number of goals to count game.
4. The contesting teams shall consist of six a side, with one reserve man, who can take the place of one of his side in case of disablement, and receive prize if on the winning side.
5. Time of play, 20 minutes; 10 minutes each way and 5 minutes' rest at half time.
6. The captains shall be playing members of the teams they represent, and shall toss for choice of ends of tank. The ends to be changed at half time.
7. Game to be started by referee at the sound of whistle, the ball to be thrown into centre of tank.
8. Ball going out of the tank to be thrown in centre opposite where it crossed bounds.
9. No player is allowed to interfere with an opponent unless such an opponent is in actual contact with the ball or within three feet of it. Any player transgressing this rule shall be guilty of a foul. It shall also be a foul to hold any player by any part of his costume.
10. A mark shall be placed on either side of tank, 4 feet from each goal, and no player may come within his opponent's goal line (an imaginary line between these two marks) until the ball is put in play over this line. The goal-keeper alone may stand within it. It shall be foul to cross this line ahead of the ball.
11. Upon a goal being gained the opposite teams go to their own end of the tank, and the ball is thrown by referee into the centre on play being resumed.
12. Teams shall have an umpire at each goal line, who upon goal being made shall notify referee, who will blow a whistle and announce the game.
13. The referee shall decide all fouls; and if in his opinion a player commits a wilful foul, he shall be cautioned for the first offence, and for the second the referee shall award a foul to the opposing side. After a foul the ball is to be thrown into the centre of the tank, when play will be immediately resumed. Waiting the casting of the ball, the players may place themselves as they please anywhere in the tank, excepting, of course, within the 4-foot goal boundary.
14. Time occupied by disputes shall not be reckoned as in the time of play.

Caspar W. Whitney.


1
2
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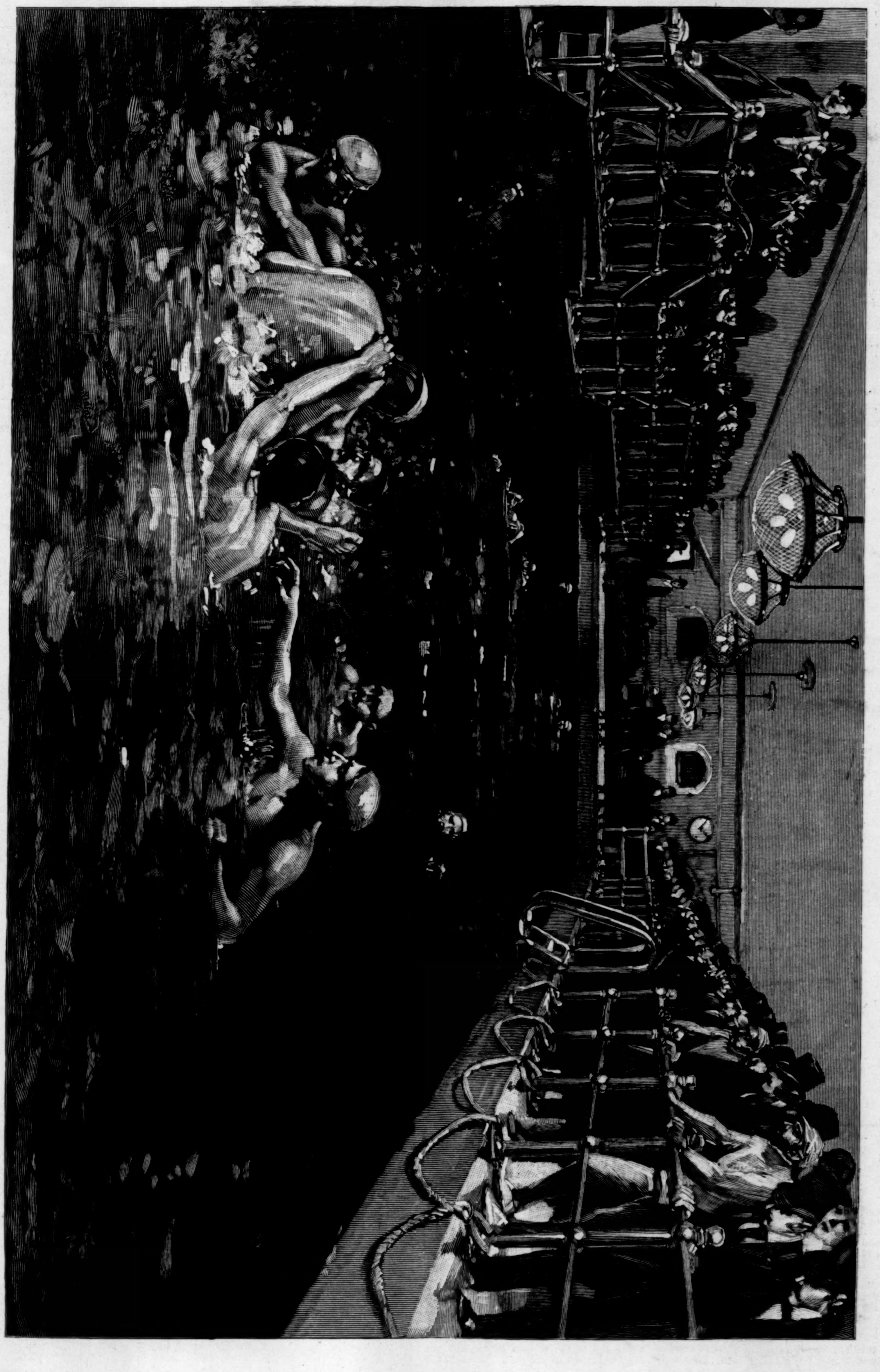
PORT HURON
TUNNEL
ST. CLAIR RIVER

1. Excavating for the Approaches. 2. The old way of Transferring. 3. Taking out the Air-lock. 4. Putting in the Road-bed. 5. Under the River.

DRAWN BY CHARLES GRAHAM.—[SEE PAGE 158.]



WATER POLO AT THE MANHATTAN ATHLETIC CLUB.—Drawn by T. de Thulstrup.—[See Page 155.]

THE ST. CLAIR RIVER TUNNEL.

BY T. G. LA MOILLE.

ONE of the world's greatest wonders of engineering is the Grand Trunk Railway tunnel, soon to be opened for traffic, under the St. Clair River, between Sarnia (Ontario) and Port Huron (Michigan). The three men most directly responsible for the successful solution of this problem are: Sir Henry W. Tyler, president; Sir Joseph Hickson, late general manager; and Mr. Joseph Hobson, chief engineer of the Grand Trunk Railway. Other persons connected with this work deserve much credit for their zeal and skill.

In 1874 Sir Joseph Hickson became general manager of the Grand Trunk Railway. He foresaw the enormous advantage his lines would possess by rapid transit at the St. Clair River. The Grand Trunk Railway reached Sarnia in 1858. A western ally, the Peninsular, or Chicago and Lake Huron, was opened toward Chicago as far as Valparaiso, Indiana, in October, 1873, and reached Chicago in February, 1880, when it became the Chicago and Grand Trunk. The Great Western and other lines in Canada and Michigan were consolidated with the Grand Trunk system. That now comprises nearly 5000 miles of steel tracks from Lake Michigan to the Atlantic Ocean and the Great Lakes.

This St. Clair tunnel will be used by the traffic of various roads, including the Grand Trunk of Canada and its leased lines, the Great Western, the Chicago and Grand Trunk, the Port Huron and Detroit, the Detroit, Grand Haven, and Milwaukee, the Michigan Air Line, the Toledo, Saginaw, and Muskegon, the Cincinnati, Saginaw, and Mackinac, etc.

These railways have kept busy the immense steam-car ferries between Point Edward (Canada) and Fort Gratiot (Michigan). Though the cost of this ferriage has been enormous, its use has not been satisfactory. There the river's current is swift, from six to eight miles an hour. Ice jams are frequent. A powerful tug has to be kept ready all winter to occasionally extricate these ferry-boats from floating fields of ice. The railway has had to deviate to Point Edward and Fort Gratiot, about six miles, which extra travel has caused loss of time and other large expense. The adjacent level country would necessitate building a very high bridge. The marine interests were united against a bridge. The commerce on the St. Clair River, it is said, exceeds that of any other stream in the world. The more feasible plan appeared to be a tunnel. Tunnelling through dry land or rock was understood, but the contractors drew the line at quicksand and clay under water. So this life dream of the railway manager appeared destined never to be realized. Its accomplishment seems like a leaf out of some Oriental tale.

In 1884 Messrs. Hobson and Hillman surveyed the St. Clair River for the best place for this proposed tunnel. They selected a location about a mile below Sarnia, near the Indian Reserve, now in that town's suburbs. Borings were made to the rock, 86 feet below the level of the water. The river's greatest depth was 40.47 feet. Its width was nearly half a mile.

The strata were found to be as follows: About two feet of common yellow sand, like on the sea-shore; about 12 feet of a mixture of quicksand and blue clay; next, down to the rock, about 21 feet of blue clay, adhesive and putty-like, and increasing in tenacity as it increased in depth.

Drawings and plans were made. The St. Clair Tunnel Company was formed, with the following officers: President, Sir Joseph Hickson, general manager Grand Trunk Railway; vice-president, Mr. L. J. Seargeant, traffic manager Grand Trunk Railway; secretary-treasurer, Mr. Robert Wright, treasurer Grand Trunk Railway; directors, Hon. Alexander Vidal and Mr. Charles Mackenzie, Sarnia; Mr. J. Bell, Belleville; Mr. W. J. Spicer, general manager Chicago and Grand Trunk Railway, Detroit; Mr. E. W. Meddaugh, general solicitor of the Chicago and Grand Trunk Railway, Detroit; solicitors, Mr. J. Bell and Mr. E. W. Meddaugh; chief engineer, Mr. Joseph Hobson, Hamilton; first assistant engineer in charge, Mr. Thomas E. Hillman; second assistant engineer, Mr. M. S. Blaiklock; mechanical superintendent, Mr. J. T. Eames; superintendent of excavation, Mr. Thomas H. Murphy. This tunnel company was organized in 1886.

In the fall of 1886 test shafts were sunk on both sides of the St. Clair River. The Canadian was 98 feet deep; the American, 92 feet. Each was 14 by 4 feet, and lined with pine twelve inches wide, built up like the walls of a grain elevator, with a stay across the centre. At the bottom, drifts at right angles were started under the river, and continued about 30 feet on the American side and about 150 feet on the Canadian. Water and gas stopped further progress. These horizontal drifts were six feet in diameter, and were experiments. They were abandoned in the summer of 1887.

The company had at first decided to build under the river from immense shafts on the shore, and finish later the land borings. The final conclusion was to begin at the ends of the great cuttings for the land approaches.

Work on the large shafts began in the summer of 1888, about 75 feet from the river. The American was sunk 58 feet, and stopped. It will be used as a ventilator. The Canadian was sunk 98 feet, and abandoned. Each large shaft was made 23 feet in diameter, and lined with brick walls two feet six inches thick.

The plants, machinery, and equipments were moved back from the river—in Michigan, about 1800 feet; in Ontario, about 1900 feet. On each side of the river were located one boiler-house, containing three boilers, two kept constantly in steam; a room with one pair of hoisting or winding engines; a room containing one ventilating engine, and a blower with a capacity of 10,000 cubic feet of air per minute; a Worthington hydraulic pump for operating the rams; one blacksmith shop; one carpenter shop; one machine shop, containing one drilling machine, one bolt-screwing machine, and one planing machine, with extra bed and extra table, thus keeping the plane constantly at work; a pump in the pit to pump out water; one electric-light room, holding two engines and dynamos; on the Canadian side a Ball, and on the American an Edison, electric-light plant. At all hours of day and night this tunnel will be brilliantly illuminated with incandescent electric lights, supplied by a station in Port Huron. New and permanent boiler and engine rooms have been erected of brick.

Upon each side of the river the great cuttings for the approaches were commenced on New-Year's, 1889. The Canadian excavation was about 58 feet deep, and not very wide, as the soil appeared firm. A landslide filled this cutting 16 feet deep. This immense sinking of the soil threatened the foundations of the workshops, so the tunnel was recommenced about 150 feet further inland. The depth of the Canadian cutting at the tunnel's portal is 60 feet. This cutting is 260 feet wide at its broadest portion. On the American side quicksand and clay caused the great cutting to be made 52 feet deep and about 200 feet wide. Down into each spoon-like pit inclined tracks were laid for engines to haul out the dirt. Derricks were also erected for hoisting out the soil. In September, 1890, steam-shovels were set at work on these cuttings. Presently two steam-shovels were used on each side; each shovel was attended by an engine and train of flat cars. Rains greatly hindered these steam-shovels. They worked day and night. The soil was removed in layers. Several hundred men were employed.

The St. Clair tunnel could not have been accomplished without the aid of the excavating shield, whose invention is claimed by an American, Mr. Alfred E. Beach, of New York. He designed such a shield in 1868 for the tunnel under Broadway, New York. This design has been used successfully in Buffalo, Chicago, under the Hudson River, in London, and other places.

This shield is a strong cylinder, resembling a big barrel with both heads out. The front end has a sharpened edge to cut into the earth. About two feet of the rear end is thin, and called the hood. Around the main walls and partly lengthwise therewith are sets of hydraulic jacks. Each jack has a valve whereby it may be cut off at any time from the pump that supplies all the jacks. Within the shield are braces and shelves, both vertical and horizontal.

At work, the masonry or iron plates of a tunnel are built up within the thin hood of the shield, then the hydraulic jacks are forced to press against the masonry or plates, which results in pushing the shield ahead into the earth a distance equal to the length of the pistons of the jacks, for example, about two feet. As the shield advances, men in the front of the shield dig out and carry back the earth through the shield. By the shield's advance the hood, within which the masonry or iron is built, is drawn partly off and ahead of the constructed tunnel. Thus the hood is left empty. The pistons of the hydraulic jacks are next shoved back into their cylinders. A new section of the tunnel is then built within the hood. The shield is again pushed ahead, and the process repeated. The hood always protects and covers the extreme end of the tunnel. By means of the hydraulic jacks' pressure being regulated, the shield may ascend, descend, or follow any curve.

Each of the Beach hydraulic shields used in the St. Clair tunnel weighed 80 tons. They were manufactured at Hamilton, Ontario, brought in pieces to and erected on the north side of the tops of the cuttings. Each shield was circular, 21 feet and 6 inches in outside diameter, 16 feet long, and built of plate steel one inch thick. It was divided into twelve compartments by three vertical and two horizontal stays or shelves, each stay two inches thick. These stays had a knife edge in front. They extended back 10 feet, and left six feet of clear cylinder between them and the end of the tunnel lining. Ten of the compartments were closed permanently, and braced with angle iron. The other two compartments were provided with heavy iron doors, which, in case of a flood or accident in the shield, could be closed at once and shut off danger. These doors never had to be closed. They were situated in the bottom at the centre. Through them was passed all the excavated matter. Electricity lighted the shields and tunnel.

When erected, the shields were rolled down into the cuttings on wooden tracks, invented by engineer J. T. Eames, composed of four timbers each one foot square, and placed about four feet apart. Each shield was steadied downward by six rope cables around the shield, fixed at one end to the upper end of the wooden incline, and the other end coiled around piles. Men held the loose ends, and lowered out when the order was given. It took eighty minutes to lower a shield on to the prepared cradle at the bottom of the cutting. When the shields were in position, a backing of timbers one foot square was built against the clay or shores, and to this timber backing the first section of the tunnel was bolted. These shields led the way for the diggers.

At equal distances around the back of each shield were two dozen hydraulic rams. Their cylinders projected forward into the compartments. Each ram could be worked independently. Mr. J. T. Eames arranged the system of valves so two men could do the work of twenty-four. By turning the cocks the pistons were pushed against the tunnel lining, and shoved forward the shield enough to allow another section of the tunnel lining, 18 inches wide, to be built. This hydraulic power was supplied by a Worthington pump, capable of producing a pressure of 5000 pounds per square inch, which would amount to 125 tons per ram, or 3000 tons on the 24 rams. The greatest pressure used in the tunnel was 1700 pounds per square inch, equal to 40 tons per ram, and 960 tons on the shield. Each ram was eight inches in diameter, and had a stroke of 24 inches.

The observation of the direction of the shield was very interesting. From a small house in the line of the tunnel these observations were taken every morning. The transit was a fine one, made especially in London, and was set on masonry. A series of disks and a tube with cross wires enabled the engineer to discover, to the very small fractions of an inch, any deviation in the direction of the shield. This deviation was marked on a diagram. One copy was sent to the chief engineer at Hamilton, and one was kept at the works. The man in charge of the hydraulic rams was informed of any variation of the shield, and he adjusted the jacks to correct any error. This deviation was rarely more than a quarter of an inch. When the shields met they were exactly in line, which was a triumph for the engineers. The shells of the shields were left in the tunnel. Their interior arrangements were taken out, and the tunnel's iron walls built up as usual.

The American shield was started on Thursday, July 11, 1889; the Canadian, on Saturday, September 21, 1889. They met edge to edge at 11.30 P.M., Saturday, August 30, 1890, after travelling 6000 feet. The shields' shells remain there. The American had done the most. The work had been pushed day and night, in three shifts, each of eight hours. Each shield averaged an advance of 10 feet per day. The most they advanced any day was 27 feet 10 inches. The easiest progress was toward the Canadian side. The time spent excels the former record of tunnel construction of the kind. The following table shows the amount of work accomplished each month by the shields:

1889.	American. Feet.	Canadian. Feet.
July	53.00	....
August	144.50	....
September	153.70	73.30
October	126.75	169.45
November	225.50	187.50
December	266.91	217.40
1890.		
January	277.59	292.35
February	273.67	306.08
March	203.63	292.50
April	182.20	281.34
May	355.54	97.00
June	354.46	236.83
July	382.30	201.30
August	314.10	331.05
Totals for 14 months	3313.85	2686.10

The tunnel walls are made of cast-iron segments. This lining was the idea of Mr. Joseph Hobson. In the circle are 13 segments and a key. The size of a segment is: Length, 4 feet 10 inches; width, 18 inches; thickness, 2 inches, with flanges inside 1½ inches thick and 6 inches deep. Each segment was cast with 32 holes, 12 in each side flange and 4 in each end. The segments are secured in their places by bolts seven-eighths of an inch in diameter. The bolts in the flanges took in a circle 20 feet 5 inches in diameter. The edges of the cast-iron segments were planed in the machine shops near each end of the tunnel. The segments were then heated and dipped in coal-tar. At first the cold iron had been dipped in the boiling liquid. The tar would not dry soon enough, and it dripped incessantly in the tunnel. Then some keen-witted workman suggested that the iron be heated. That plan worked first-rate. The tar was kept cold in a big vat. The heated segments absorbed the tar quicker, and by the time they were cool the tar was dry.

The segments were put in place by a circular crane designed by Mr. Teiper, of Hamilton, Ontario. This crane revolved on a spindle in the centre of the shield. This spindle had a vise at one end and a counter-balance weight at the other. The vise gripped the casting, and that arm of the crane rose about nine inches, which shortened the vise arm and lengthened the counterpoise arm, and thus gave the segment a clearance to travel around to the desired point, where it was placed in position by reversing the sliding motion.

At first English tiling tools (long thin spades) were used to remove the clay. A workman, a cooper by trade, devised a tool from an old saw bent like a horseshoe with which he could do the work of three men. This knife was adopted. Two men, grasping the two handles, reached up and sliced out slabs of the blue clay several inches thick and a yard long. They easily kept ahead of the layers of the lining. These slabs were loaded upon flat cars by men called "muckers." Mules and horses drew the clay-loaded cars out of the tunnel. On one track of the tramway the cars were hauled out; on the other track the empty cars returned by their own gravity. About two feet of clay formed the bed of this tramway. After the tunnel was through, about two months were required to remove this clayey bed. At the mouths of the tunnel these cars were pulled or hoisted to the level, and dumped upon large railway flat cars that removed the soil to the sites of the new freight yards, etc.

When the tunnel from the Canadian side reached the bed of the river, quicksand and water caused much trouble. For a while it was nearly feared that the tunnel would have to be abandoned. At last a remedy was found—compressed air. At the line of the river, on both sides, air-tight bulkheads of brick and cement were built across the tunnel. Each side of these bulkheads had two air chambers 7 feet in diameter and 17 feet long, with air-tight doors at each end. One of these air-chambers was built over each car track.

The work in the section next to the shield was begun under an air pressure of 10 pounds to the square inch, which was gradually increased from time to time until the men worked under an artificial pressure of 22 pounds per square inch, or a total atmospheric pressure of 37 pounds per square inch, or about 2½ atmospheres. Quicksand caused highest air pressure to be exerted on the Canadian side. The air-compressors were 20 by 24 inches. They were continually at work for nearly six months, or till October 2, 1890. They began using compressed air on the American side on April 7, 1890; on the Canadian, May 20, 1890.

When a gang of men or a car was to be admitted into the compressed-air chamber, its outside door was opened. That iron door was then closed. Next the air valve was opened into the chamber until the pressure in that room equalled that of the inner section of the tunnel, or that below the river. The door leading into the inner tunnel could then be opened without difficulty.

This compressed air benefited by its pressure, keeping back the quicksand and the water. A leak would not show itself. The air pressure kept the clay and sand from gushing into the front of the shield and endangering the lives of the workmen.

Horses could not stand the compressed air. Where that was, only mules could be used to draw the cars.

Three gangs of 75 men were employed in the compressed air. They had to have strong constitutions, and be examined by the company's physician before being admitted to the compressed-air section. Two deaths resulted from the ill effects of the compressed air, because, the company claims, its rules were not observed. In the air lock the air had to be gradually reduced or increased on a man. That process required about five minutes. If the air were let off too fast, when a man reached the outer air he found himself attacked with what the men called the "benders"; that is, his knees wabbled under him, and he bled at the nose, mouth, and ears. Three accidents occurred because a reckless workman let the air off too fast. The bulkheads containing the air locks were taken down. The air pressure has been removed. The air is pure in the tunnel. There will always be good ventilation in this tunnel.

Sunday afternoon, August 24, 1890, the two gangs of workmen talked and passed articles through the auger hole bored between the two shields. The "eight o'clock shift" removed the earth.

The first man through the hole was Chief Engineer Hobson, followed by Engineers Murphy and Eames, Hon. C. McKenzie, M.M.P., and Dr. T. G. Johnston, of Sarnia, the company's physician. The working force passed through the tunnel within a few hours.

From a mouth of the tunnel the tube's circle showed inside long lines of star-like, incandescent electric lights, shining as far as the vision reached. A huge horse, on whose back was perched a little lad, had brought up cars loaded with clay. A roar far away was the compressed air being let off an air chamber. The tunnel's walls were dry, and resembled the ribs of a ship. Immense pipes and numerous wires were strung overhead, like serpents stretching away. Seated upon cars literally soiled, a rapid passage was made down the incline. The clusters of electric lamps made the tunnel as light as day. The car brake was set at the entrance to an air lock. Beyond that iron door the same general features were found.

The total length of the St. Clair tunnel proper is 6000 feet. Under dry land on the American side is 1716 feet; on the Canadian, 1994 feet; underneath the river, 2290 feet. The outside diameter of the tunnel is 21 feet; the inside, 20 feet. At its lowest point the top of the tunnel is 56.83 feet below the level of the river. The river's greatest depth is 40.47 feet. It is 86 feet from the level of the water to the rock. The least depth of clay above the tunnel is 8.43 feet. The grades are: on the shores, from the portals to the river, one foot down in every 50 feet; beneath the river, one foot down in every 1000 feet, toward the Canadian side, to that drainage shaft. The amount of soil excavated for the tunnel proper was over 2,000,000 cubic feet. The tunnel's cast-iron lining weighed 54,000,000 pounds. To secure this lining required 828,150 steel bolts seven-eighths of an inch in diameter. The length of the open cutting and approach on the Canadian side is 3192 feet; on the American, 2533 feet. This tunnel and its approaches have a total length of 11,725 feet.

The average number of men employed was 700. They were unusually intelligent, and took an intense personal interest in the success of this undertaking. In the tunnel eight hours made a day's work. On the American side the most serious accident was the breaking of a man's leg.

This tunnel was estimated to cost $2,500,000, including plant, material, and labor. That sum will probably not be exceeded. A second tunnel will probably be made near this, and in that case the present plant and experience will be of great value. The cast-iron tunnel is superior to the old-style brick and cement one.

The tunnel will drain itself into a pump shaft on the Canadian side. This shaft is 15 feet in diameter and 112 feet deep, and goes down to the rock. This shaft was sunk in the full expectation that the quantity of water to be pumped would be large. That is, however, so small (not exceeding fifteen gallons per minute) that it will not be required. The surface and rain water is not allowed to enter the tunnel, but is intercepted at the portals and disposed of by pumping. Underneath the railway track in the tunnel are three spaces for drainage purposes—one of 18 inches and two of 12 inches.

After the shields met there was still much work to do. The tunnel was very dirty. It was cleaned, and covered with a preparation to prevent rusting. The tramway's bed of clay was removed. The bolts were tightened up. The bulkheads of the air-chambers were taken down. Brick and concrete were placed in the lower third of the tunnel to prevent the brine from meat cars leaking on the casing and rusting it. The brick-work was plastered over. Safety platforms and ladders were erected. The rails are extra heavy, 100 pounds to the yard. The track is standard gauge—4 feet, 8½ inches. On each side and under this track are creosoted pine timbers. All the ties and guard rails are of creosoted pine. The tunnel proper was finished Sunday, January 20, 1891.

Each portal is 36 feet high above its foundation. The depth of the Canadian great cutting at the portal is 60 feet, of the American great cutting, 52 feet. The diameter of the circle is 20 feet and flush with the tunnel. The portals are made of heavy, rough limestone, dressed at the joints. The stones forming the tops of portals are made with a high centre to shed the rain. The portals are 10 feet thick over the entrance circle, and narrow down to about half that width at each end. The Canadian portal is 148 feet wide; the American, about the same.

The tunnel approaches are of the same substantial character as the rest of the work. There are stone retaining walls on each side of the great cuttings—at the deepest portions six feet high and five feet wide; near the entrances to cuttings five feet high and three feet wide.

The selection of suitable locomotives for use in this tunnel was a subject of much concern. Several kinds were rejected because of gas and smoke. Coke engines were finally selected. They will be of the "consolidated" pattern, and built at the Grand Trunk shops. Each engine will be able to draw 25 heavily loaded cars. One engine on each side of the river will be used, and one reserved for accident. The steam-car ferry up the river will be discontinued.

The passenger and freight cars for tunnel passage will be sorted in immense yards on each side of the river. These yards have been filled level with the tunnel excavations, and are to have 20 miles of sidings.

The opening of this tunnel will be duly celebrated. That time depends greatly upon the character of the winter. It will not probably be opened before next spring, perhaps about May 1, 1891. Citizens of Port Huron and Sarnia are arranging to co-operate with the Grand Trunk Railway officials for a grand celebration of the completion of the tunnel. It will be the greatest international event which has taken place for years. Railway men and others will be invited from Canada, England, and the United States. The President and cabinet officials, the Governor-General and his Council of Ministers, Governors of States and provinces, and other lords and ladies will be invited. One feature of this jubilee is expected to be a banquet under the river.

One of the largest mortgages ever recorded in Michigan was placed on record in Port Huron August 26, 1890. Its amount was $2,500,000. It was given by the St. Clair Tunnel Company to E. W. Meddaugh and Lewis J. Seargeant as trustees, to secure bonds running 50 years and bearing 5 per cent. annual interest, to build yards, engine houses, etc. This mortgage covers all the present property of the company on both sides of the St. Clair River. From the wording of the mortgage it is shown that this tunnel company purposes to allow other railways than the Grand Trunk system to use the tunnel, for there is a special provision that rent and tolls can be collected for such service.

Mr. Joseph Hobson, the chief engineer and builder of the St. Clair tunnel, is a Canadian by birth, having been born near Guelph, Ontario. He served his apprenticeship as a provincial land surveyor in Toronto, and after having passed his examinations as such, he was engaged for a number of years in private practice as a surveyor and an engineer, and in the location and construction of different lines of railway in Canada and the United States. At the beginning of 1870 he was appointed resident engineer of the International Bridge across the Niagara River at Buffalo, and was continuously on the ground during the construction of the bridge. On the completion of that work, at the end of 1873, he was appointed chief assistant engineer of the late Great Western Railway of Canada, and about two years later he was appointed chief engineer of the line. He still holds that position under the management of the Grand Trunk Railway Company. Mr. Hobson is a member of the Institute of Civil Engineers of England, of the American Society of Civil Engineers, and the Canadian Society of Civil Engineers. He may now be knighted.

WASHINGTONIANA.

Two years ago, during the celebration of the centennial of Washington's inauguration as first President of the United States, much interest was displayed in anything pertaining to the "Father of his Country." All the relics of his day were admired by a large and curious crowd, and the Loan Exhibitions were very popular. That this interest was not ephemeral, or merely aroused by the patriotic display during the celebration, is clearly proven by the attention that has been called forth by a recent sale in Philadelphia of a collection of Americana. The prices that these relics and curiosities of an olden day, especially those connected with Washington have brought, have been a general surprise. The silver plate from the outer case of Washington's coffin, which was regarded as the most curious relic of all, being only valuable from the collector's point of view, was sold for $80. We are led to believe that the cares of war or of state did not engross all the time of the great General, as one of the books exhibited was an *Atlas of the World* compiled and indexed by Washington himself. Sir Matthew Hale's *Contemplations* (London, 1685), which bore the name of "Mary Washington" on the title-page, and the inscription beneath, written by her son, "Mother of G. Washington," was regarded as very valuable, and brought $100. A lock of Washington's hair, which was cut and preserved by his barber, John Perrie, sold for $20, and an autograph letter of the general's, written from Mount Vernon in 1798, was sold for $215, while a lottery ticket signed by him brought $42 50. The historical books and documents were sold at very high figures, and the energetic bidding that all the relics called forth gave evidence of the regard and esteem in which he was held by his admiring countrymen of to-day, almost a century after his death.

It is interesting to note in connection with Washington that he is the only man whom the nation has honored in ordaining that his birthday be generally celebrated by a national holiday. Every other country has more holidays than this, especially where the sovereign is head of the established church of the state, and fast-days and saints' days are observed. In some States Arbor Day and Labor Day have been made within the past few years; but these holidays are only local, and it has been often suggested of late that some new national holiday be appointed. At a dinner in New York on February 12th, the anniversary of Lincoln's birthday, the venerable Hannibal Hamlin spoke on the subject, and in the course of his remarks said: "We speak of Washington as the Father of his Country. We know that by his policy the liberty of the colonies was secured. All honor then to Washington! In our national statutes we have incorporated an act which makes the celebration of his birthday a national holiday. If Washington secured our liberty, Lincoln just as surely preserved it, and I have come here to-night to urge upon you to join with me in demanding that Lincoln's birthday shall be made a national holiday."

AMATEVR · SPORT.

To be sensible, and inaugurate a defined boating policy under a recognized head, or to continue consequential and aimless, that is the question just now confronting the several omniscient committees and their manifold subdivisions at Cambridge. Is long-suffering Harvard to finally profit by the experience of her defeats by Yale, or must she continue a plastic victim to the wrangling of jealous and diverging cliques? Are the hopes of Harvard's aquatic success to be annihilated by personal conflictions? Has the time not arrived for alumni and undergraduates to realize the situation, and by harmonious efforts put an end to the fol-de-rol that has governed for the past few years? What stronger lesson can be given to show the unsoundness of a vacillating policy than a study of Harvard's boating history? The first boat-race between Yale and Harvard in 1876, at Springfield, was won by Yale, stroked by Cook, Bancroft stroking Harvard. For the succeeding three years—'77, '78, and '79—Harvard was victorious, under the coaching of R. C. Watson and stroking of Bancroft. During these three years the stroke was practically that now used by Yale, and variously called the "English," "Cook," "Watson," and "Bancroft." It was during this time that Yale made her first mistake of experimenting with strokes, and several very ridiculous ones were introduced.

In '80 the material at Harvard was very miserable, and an inferior crew was the result. In '82 another series of experiments was inaugurated by Yale: the rigging of the boat was changed, and, worst of all, a professional was engaged. He introduced a short, jerky stroke that was diametrically opposed to victory, and the crew was defeated, as it was also in '83, when boating at New Haven was indeed in a bad way, and Yale men were generally disconsolate. In '84 Yale, in desperation, went back to first principles, and a victorious crew was turned out; but, unfortunately, in '85 the old headless policy again predominated, and no one of the old sound school being on hand to coach, the crew was demoralized, and Harvard won an easy race. In the winter of '84 Bancroft had left the Harvard men, and here began the first of a series of blunders that have handicapped Harvard's rowing ever since. Instead of developing the policy, the rudiments of which they had mastered, or even profiting by the disastrous experience of Yale, the entire work was thrown to the winds, and Faulkner, a professional, employed. Winning in '85 with a crew that had really been drilled by Bancroft on the old lines, the Harvard men lost their heads, were carried away with the latest idea, and abandoned the old stroke for the new. From that year ('86) to this Harvard has never won a race from Yale, while the latter has been turning out finished and fast crews. Harvard in the mean time has tried many policies, had many bitter experiences, and finally, in the last year or two, has been drifting back to the old one that it abandoned in '86.

It has not been the intention here to give merely the history of college rowing, but rather by glancing over it to emphasize the disasters that have followed swift and sure upon a fickle policy. Bear the facts well in mind, ye Harvard undergraduates, and also ye members of the Advisory Committee. Yale's victorious stroke of to-day is the perfected style that Harvard first rowed, and with which she defeated her rival. I have endeavored to show here that the very moment either college has forsaken the substance for the shadow in the form of fancy and impotent strokes, just at that time has its hopes for victory been wafted skyward. The experience has been the same with both colleges; each has experimented, each suffered set backs. Yale was smart enough to sift the chaff from the grain, to discover the surest road to success, and to follow it unwaveringly. Harvard—poor, blind, struggling Harvard—has been pulled hither and thither, until nearly every one interested in boating at Cambridge has become wellnigh discouraged. Is there not a lesson in this for the Harvard men? Does it not point to the only true course which absolutely must be followed if there is any hope of defeating Yale? There is but one way to row in order to get on all power and yet maintain steadiness and smoothness, and that is the English stroke which Yale has acquired to a degree nearing perfection, and to which Harvard has been gradually coming back. The crew turned out by Harvard last year, coached by Keyes, was the best probably the crimson ever had, at least it gave Yale the closest race, the one of '81 not considered, for neither crew was very formidable in that year. The only course for Harvard to pursue is to continue from one year to another, holding to the same policy, and making every effort to improve upon the preceding year. The crew of last season was nearer the correct stroke than ever before. Doesn't common-sense dictate that the lines should be taken up this year where they were laid down last?

There has, as usual, gone up a dismal wail from Harvard; but if ordinary good judgment is used there is really no reason why the prospects should not be fairly bright. The candidates at first glance appear to be rather a light lot of men for a 'varsity crew; but on close individual inspection one realizes that, so far as beef and muscle are concerned, Harvard is well off for rowing material. It is impossible at this very early day to tell what a crew may turn out to be or do in the summer, and hardly fair to criticise the raw material. As they were at work in the new tank in the Carey building the afternoon I saw them, Powers, '92, sat at stroke. I remember him when, in his Freshman year, he rowed at three, and the recollection of seeing him do his utmost in the class races last spring, when '92 was bringing up the rear, gave every indication of his being a reliable oar. Afterward he went to New London as 'varsity substitute. He is not a powerful man, a little above the average height, and well proportioned, is still comparatively light, weighing 163 pounds even at this early day. To be sure, he may take on weight, but it is more than likely he will lose eight or ten pounds. Captain Perkins, who rowed number four last year, is at seven, and the most finished oar in the boat. He weighs 173. Rantoul, '92, is a substitute at seven. He is a light man, but equal to every pound of his 165. His very even temperament makes him a general favorite. He is susceptible to instruction, which is a blessing, and can stand a great deal of work. In his Freshman boat he rowed bow; the following year he captained his class crew, and after the class races continued rowing as a 'varsity substitute. Kelton, at six, is a familiar face. Last year was his first at the oar, but he made a fine record. Before going on the 'varsity he rowed on his class crew, and showed to such good advantage that he was immediately given a place on the 'varsity boat. His powerful jabs at the water are remembered by those that saw the race at New London last year. He is thoroughly interested in his work, weighs 190 pounds, and bids fair to become a finished oarsman if he receives proper coaching.

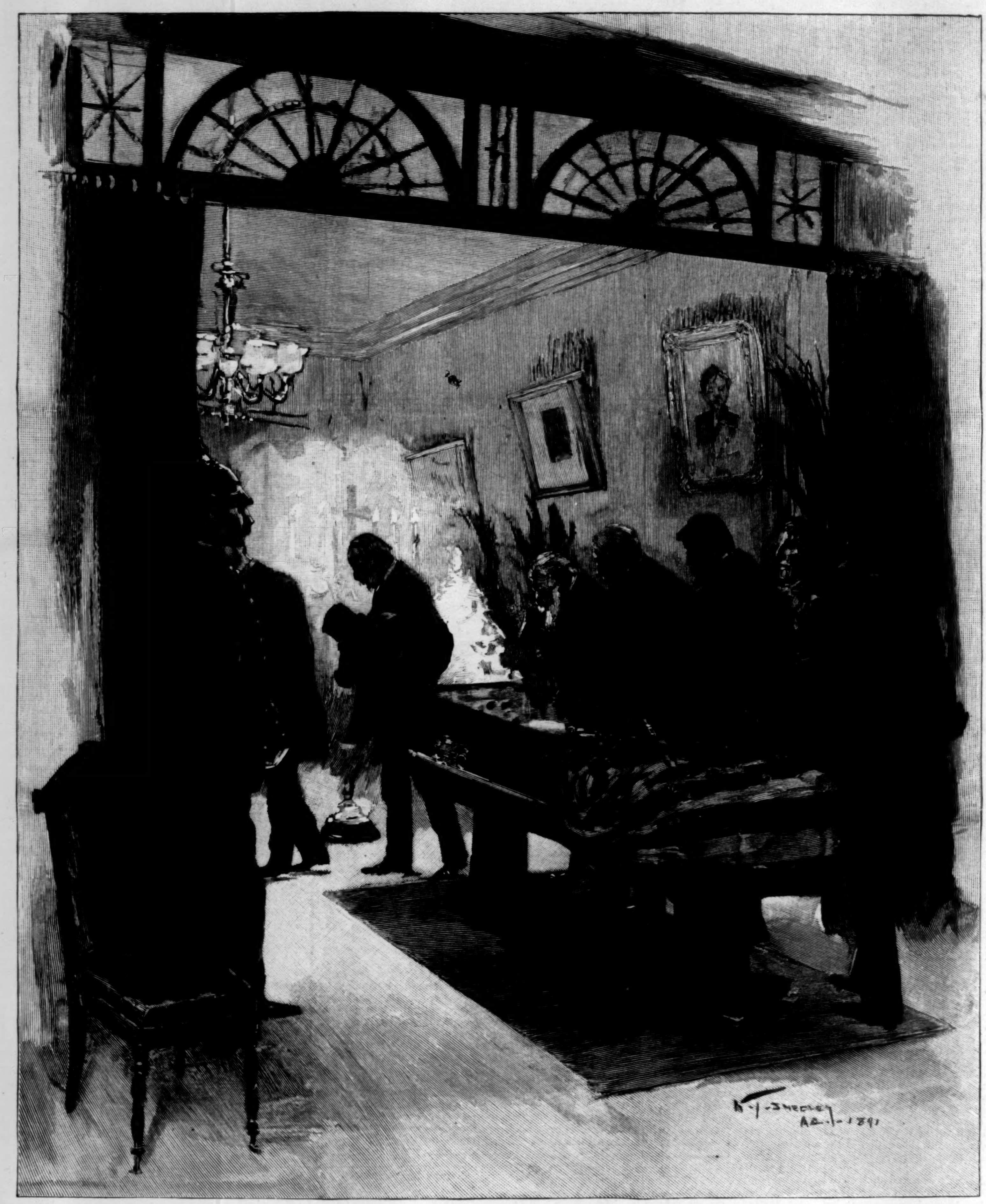
Just behind Kelton was Jones, another '92 man, weight 163 pounds, who was likewise on his Freshman crew, but the following year rowed with the 'varsity, and went to New London as substitute. He is one of the prettiest oars in college, but for some reason or other is not considered strong enough, though I have never seen him weaken at his work, and rather incline to the opinion that he can stand more than is generally believed. Number four was filled by Vail, '93, a great strapping, rawboned chap, weighing 190 pounds, who rowed in the Freshman race last June, and did fairly well. He is looking much better than he did last year, and undoubtedly the season's work hardened him a bit. He attempted foot-ball last fall, but not with a great deal of success. Lack of endurance appears to be his failing; at least such is the impression one would gain from watching him. Number three was Earl, who was captain of the Freshman crew last spring. He is one of the lightest men, and does not impress one as being particularly qualified for a place in the boat. He is a hard worker, however, and may succeed in getting a seat of which some better man has grown tired. The other two places in the boat were filled by Fitzhugh, '91, and Bartholomay. The former weighs 180 pounds, and looks every inch a rowing man. He is stocky, well built, and with several years' experience on his class crews and in the foot-ball field, he should certainly have the physique to stand a four-mile race, but he is said to require another man to drive him. Bartholomay is an entirely new man to Harvard rowing. He weighs about 167 pounds, but is built as an oarsman should be—thick in the waist, and with good strong legs. His inexperience counts against him, but if he makes up his mind to row there is no reason why he should not succeed. Shaw and Newell, names familiar during the foot-ball season, are candidates for positions in the waist of the boat. The former is in fine condition, weighing 192 pounds, and feeling as strong as an ox; he is built to row, and would be a valuable man at five if properly instructed. Newell is under the weather just now. Leyman, one of the candidates, was stroke of the Bowdoin crew last year, and has, so it is said, rowed in no less than fourteen races. If he can be gotten into shape he should prove a great acquisition, and a likely candidate for stroke. Watriss is a good man for his weight, 170 pounds, and has had quite a bit of experience; he is a good substitute, and may get a seat.

While star material is wanting, it seems there is an abundance of substantial stock ready for development. The men have been working along on much the same general principles that governed the instruction of last year, but it has been entirely too undefined. An idea seems to prevail about Cambridge that there is plenty of time to settle on policy and coach. In my judgment, this is a deplorable error. Now is the time these men are learning the rudiments of rowing, and therefore the important hour. It will be infinitely more difficult to correct wrong impressions later. It is none too early to give these men thorough schooling, nor too soon to drill them into understanding that the first principle of good crew rowing is in working together. The worst element in the rowing of Harvard crews in the past few years has been the abominable time in which the men went into the water and the unevenness with which they came out of it. Harvard will never win until she can get eight men together who can tell the difference between following a man and being two seconds behind him. What Harvard must have at once is a coach who has worked with the crew in the past few years and knows its history. Such a man is Keyes. He put out last year the best crew the 'varsity ever had, and he should be induced to take hold again this. There is a chance of defeating Yale this year if common-sense dominates the rulings of the powers that be. We reserve our comments upon the Yale crew until the next number.

Harvard's athletic committee has given the Mott Haven team permission to compete at the Inter-collegiate Championships, as predicted in this column two weeks ago.

Space does not permit handling the inter-collegiate base-ball outlook this week, but it will be taken up next.

Caspar W. Whitney.



VIEWING THE BODY OF GENERAL SHERMAN AT HIS HOME IN NEW YORK.—Drawn by W. T. Smedley.

TO BE-ROBBED OF HEALTH

By a pestilential climate, by a vocation entailing constant exposure, physical overwork, or sedentary drudgery at the desk, is a hard lot. Yet many persons originally possessed of a fair constitution suffer this deprivation before the meridian of life is passed. To any and all subject to conditions inimical to health, no purer or more agreeable preservative of the greatest of earthly blessings can be recommended than Hostetter's Stomach Bitters, which inures the system to climatic change, physical fatigue, and mental exhaustion. It eradicates dyspepsia, the bane of sedentary brain workers, preserves and restores regularity of the bowels and liver, when disordered from any cause, annihilates fever and ague, and prevents it, checks the growth of a tendency to rheumatism and gout, and neutralizes the danger to be apprehended from causes productive of kidney, bladder, and uterine ailments. To be convinced of the truth of these statements, it is only necessary to give this sterling preparation an impartial trial.—[*Adv.*]

The question of purity in food is a matter of the greatest importance, and deserves most careful and constant consideration; yet so ingenious are the methods nowadays adopted to adulterate, and the processes employed to cheapen manufacture, that it is often very difficult to determine the merits of any particular article of food. With W. Baker & Co.'s Breakfast Cocoa, however, no such difficulty arises, for it is produced from the finest cocoa seeds only, exclusively by mechanical processes, and as no chemicals whatever are used in its preparation, all possibility of impurity is avoided. The result is that W. Baker & Co.'s Breakfast Cocoa is not excelled in solubility, and is not approached in purity by any similar product in the market, and it still remains, as for over one hundred years past, the standard of purity and excellence, and the most healthful and nutritive cocoa in the world.—[*Adv.*]

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Whitens the teeth and purifies the breath. 25c.—[*Adv.*]

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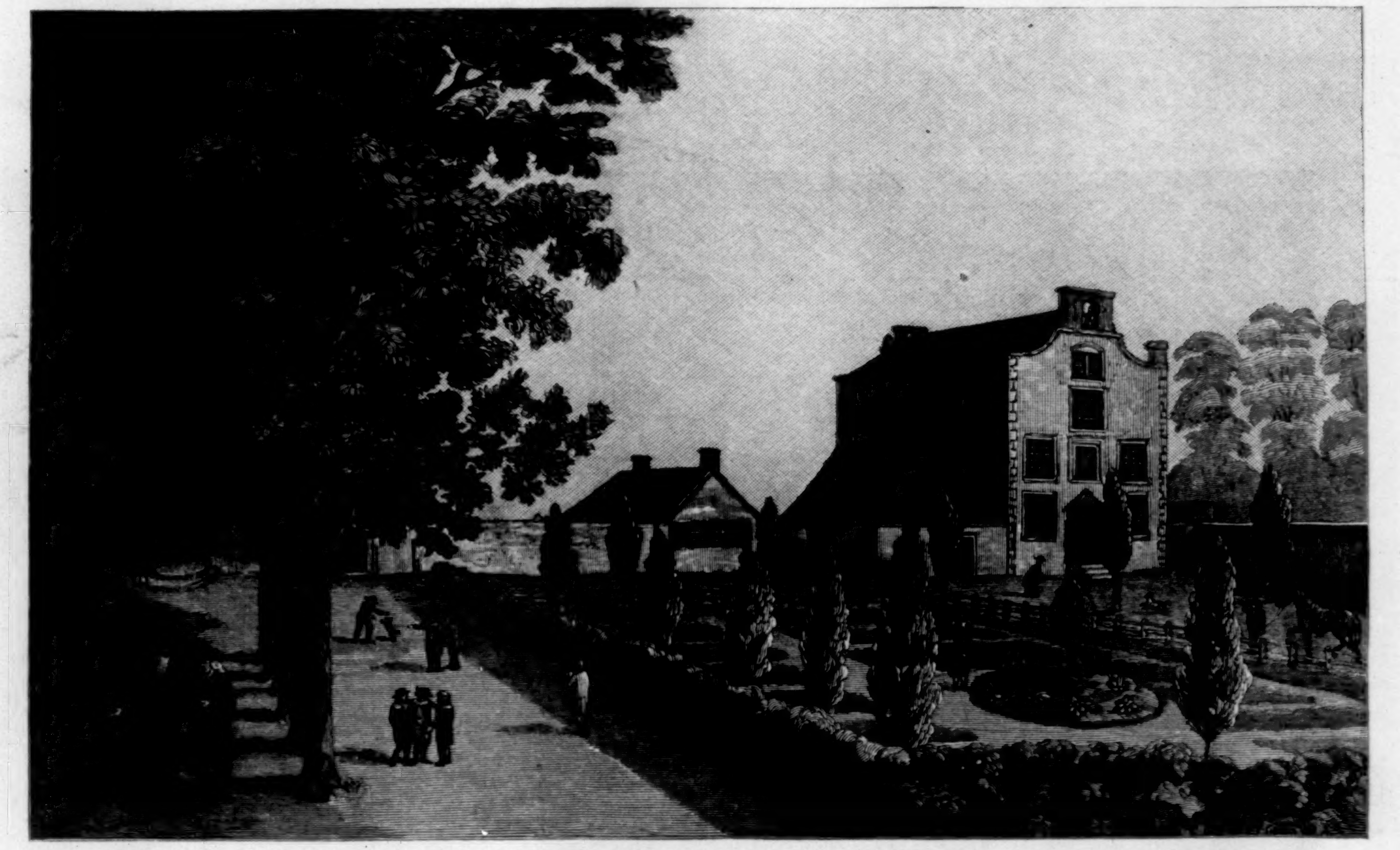


SCHOOL ESTABLISHED BY JOHN WESLEY IN 1739 AT KINGSWOOD.

JOHN WESLEY.

BY GEORGE T. PACKARD.

THE *Gazette* of the United States, in its issue for April 23, 1791, had an announcement (under date of Liverpool, March 3d) of the death of the Rev. John Wesley, in his eighty-eighth year. In the same column was given a letter from George Washington, replying to an address of the authorities of Fredericksburg, Virginia. Thus in that publication of a century ago were associated the names of the Father of his Country and the father of a religious denomination, as they are to-day in many an American home. A century-living fame is rare, but one hundred years after his death a multitude of various creeds are ready to say, with Matthew Arnold, that Wesley had "a genius for godliness," and, with Macaulay, to declare that "his genius for government was not inferior to that of Richelieu."

Wesley was born in Epworth, Lincolnshire, England, on June 17 (in the new style, June 28), 1703. He was the fifteenth in a family of nineteen children, and was christened John Benjamin, but he never used the second name. Wesley had reason for pride of ancestry. His great-grandfather, the Rev. Bartholomew Wesley, was the son of Sir Herbert Wesley, of Westleigh, Devonshire. He graduated at Oxford, as did his son, grandson, and three great-grandsons. His wife was the daughter of Sir Henry Colley, of Kildare. Bartholomew's son bore the name of John, and this earlier John had experiences in the ministry which are a reminder of the trials for conscience' sake of John, the Founder of Methodism. Both father and son were ejected from their livings under the Act of Uniformity, and subsequently ministered to Nonconformists. This first John tried twice, but unsuccessfully, to go as a missionary to America. His wife was the daughter of the Rev. John White, of Dorchester, and a niece of Dr. Fuller, the Church historian. The father of John, the Founder, the Rev. Samuel Wesley, was rector of Epworth for about forty years. He was trained for the Nonconformist ministry, but came gradually into sympathy with the Established Church, and entered himself as a "poor scholar" at Exeter College, Oxford. He went to the university with £2 5*s*. in his pocket, received five shillings from his family and friends while there, and having earned his way, left Oxford with no debt and with £10 in his purse. He was all his life hard at work, and always poor. Despite his laborious experience, Wesley's father, it is interesting to note, was on friendly terms with the Muses while in college, and even dealt successfully with such arduous subjects as these: "The Tame Snake in a Box of Bran," "A Cow's Tail," and "A Hat Broke at Cudgels."

The attractiveness, refinement, clear judgment, and piety of Wesley's mother belong to the treasures of religious biography. She was the daughter of the Rev. Samuel Annesley, who was ejected from his living in 1662, and was subsequently known as the "St. Paul of the Nonconformists." His grandfather was Viscount Valentia, while the first Earl of Anglesea was an uncle. Wesley's mother, furthermore, was the granddaughter of John White, a prominent member of Parliament. Thus men and women of a fine type were numbered in the Wesley line. Large expectations were naturally entertained concerning Wesley, and he was not to disappoint them, for in another century an English historian could say of him, "He embodies in himself not this or that side of the new movement [Methodism], but the very movement itself."

Epworth, where Wesley's childhood was passed, was a market-town of about two thousand inhabitants. His father's income from the living was only £200 a year, and there was a large family to support. Troubles multiplied. Twice was the rectory burned. One of these fires occurred when Wesley was six years old, and he narrowly escaped death. Forty years afterward a watch-night congregation was mightily stirred by his account of his rescue from the flames. His mother's account of the home life in the Epworth parsonage says: "When turned a year old (and some before), they [the children] were taught to fear the rod and to cry softly; by which means they escaped an abundance of correction they might otherwise have had." The children began school when five years old, and the mother was the teacher. One day was allowed for learning the alphabet. Two of the children, to the mother's disappointment, were a day and a half about it. The religious training was strict and methodical. In this model home Wesley learned to be industrious, reverent, exact, and prompt. The children found no chance to sham or shirk.

In 1714 Wesley was nominated by the Duke of Buckingham for the Charterhouse, the famous London school which readers of Thackeray associate with the names of Slaughter House, Smithfield, and Grey Friars. His new home was formerly a Carthusian monastery, and its interesting historical associations made a strong impression on him. Addison and Steele had been pupils of Dr. Thomas Walker, Wesley's chief teacher. Wesley was liked by the instructors and by the boys, the latter gathering about him to hear him tell stories. Already he could make an audience listen. His brother Samuel, then an usher at Westminster school, wrote his father, "My brother Jack, I can faithfully assure you, gives you no manner of discouragement from breeding your third son as a scholar." The years at the Charterhouse so endeared the spot to Wesley that he often turned aside from his work as an itinerant to visit the school. He had well used particularly good advantages, and therefore when he entered Christ Church College, Oxford, in June, 1720, he was ready to make his university life profitable.

The lack of means still gave Wesley anxiety, and in the early part of his course his health was somewhat delicate; but despite these drawbacks he ranked so well later on that he was thus described: "The very sensible and acute collegian, baffling every man by the subtleties of logic, and laughing at them for being so easily routed; a young fellow of the finest classical taste, of the most liberal and manly sentiments." Like his father before him, Wesley wrote poetry in college, and in his journeyings as a field-preacher he was to show that he had the heart and the eye of a poet. Such was his capacity as a scholar that his father at one time wished him to devote himself to "critical learning," but this desire gave place to a longing to see his son in the ministry. The thought of entering holy orders was already in the son's mind. The reading of Thomas à Kempis deepened this desire. Jeremy Taylor's *Holy Living and Dying* and the Rev. William Law's *Serious Call to a Devout and Holy Life* also contributed to that spiritual enlargement which marked a new period in Wesley's religious experience. So anxious was he that no time run to waste that he began keeping a diary, and recorded the way he spent every waking hour. These entries prepared the way for the elaborate journals which have revealed so clearly what he was as a scholar and a religious leader.

Wesley was ordained a deacon in the Church of England on Sunday, September 19, 1725, by the Bishop of Oxford. The service was in Christ Church Cathedral, where three years later he was ordained a priest. Becoming a candidate for a fellowship in Lincoln College, Oxford, his "serious behavior" was made an argument against him, but in due time he was unanimously elected. "Whatever I am, my Jack is fellow of Lincoln," wrote the delighted father. Wesley now began to restrict his social activities, choosing companionship only with those who would assist him in his more circumspect religious life. It was at this time that he wrote his mother, "Leisure and I have taken leave of one another."

The only parish work (save occasional services) in the Church of England Wesley did was as his father's curate at Wroote, near Epworth. Here he spent three years. He was then summoned back to Oxford, and acted as tutor for a number of pupils. He presided at debates in which students were the disputants, and this constant exercise of his reasoning powers was a discipline of much practical value, as Wesley assures us: "I could not avoid acquiring thereby some degree of expertness in arguing, and especially in discerning and pointing out well-covered and plausible fallacies. I have since found abundant reason to praise God for giving me this honest art."

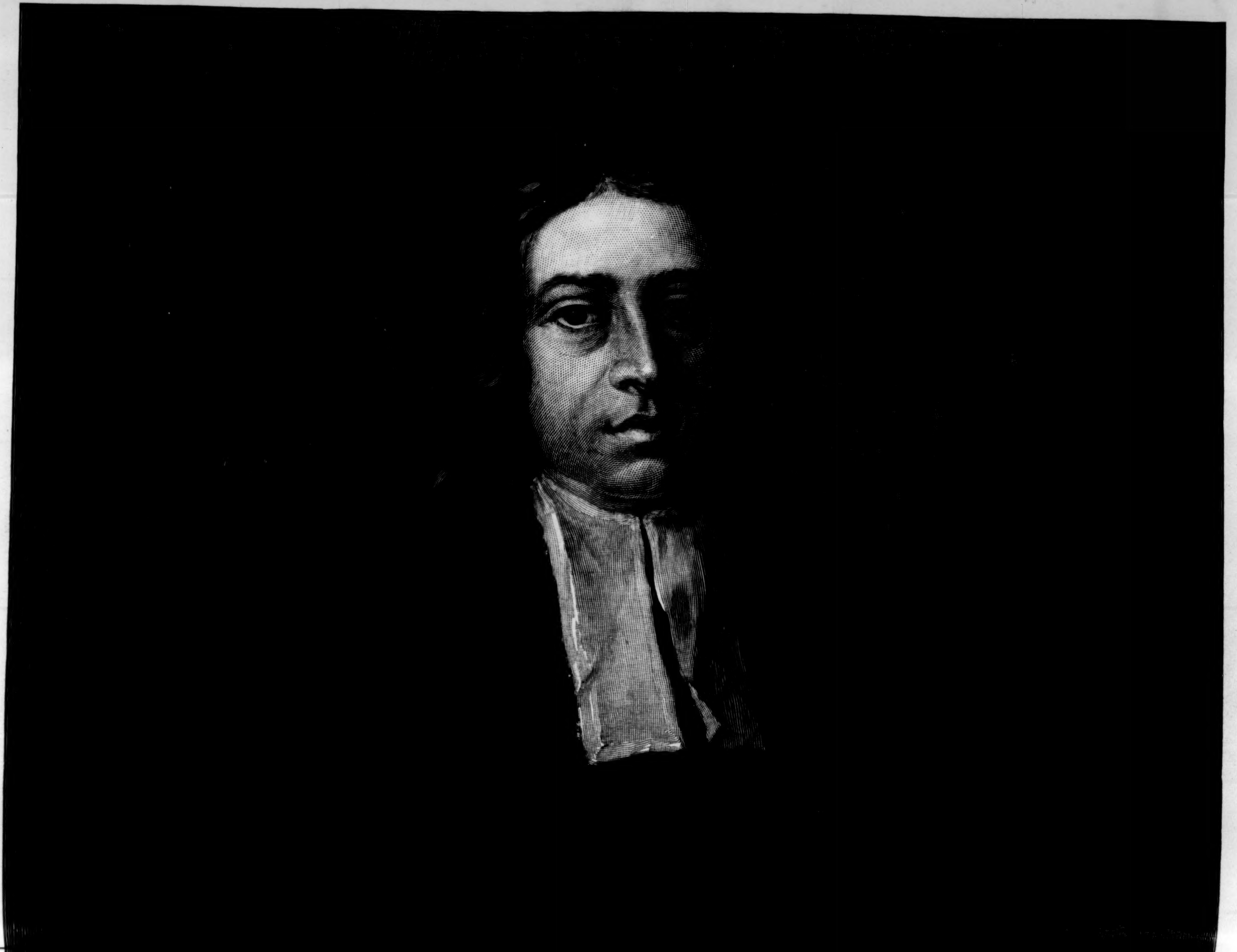
In that room in Lincoln College which is pointed out to visitors as "Wesley's room," while "Wesley's vine" clambers up the walls without, the young scholar did work which gave him repute for a fine literary taste. He had skill in logic; he was fond of mathematics, and experimented in optics—he was, in a word, a good "all-round" scholar. He now began the practice of rising at four in the morning. Sixty years later he could say that he had made that hour the time of his getting up ever after that morning in Oxford, and that, taking the year round, he did not lie awake a quarter of an hour in a month. Probably this part of Wesley's example has had the fewest imitators.

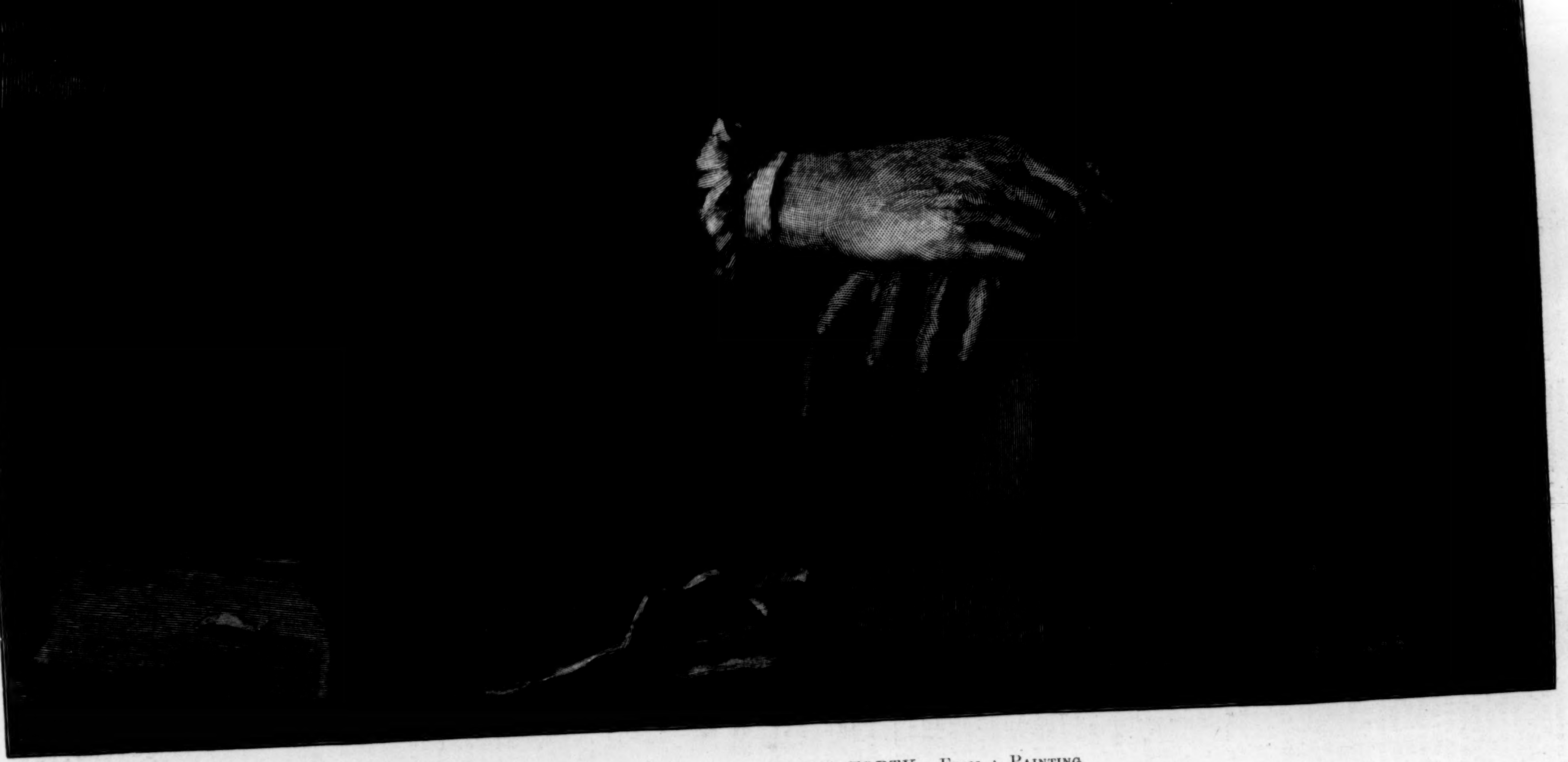
When Wesley returned to Oxford he found that his brother Charles, now a college tutor, was more attentive to his religious duties. He had gathered a few like-minded friends about him, whose system in study and soberness of demeanor had earned for them the name of Methodist. They were marked men throughout the university. Other names for this band were "Bible Moths," "Enthusiasts," "Supererogation Men," "Sacramentarians," "the Godly Club," "the Holy Club," and "the Reforming Club." John Wesley became at once the leader of these men, and was known as the Curator of the Holy Club. Besides the Wesley brothers, the original members were William Morgan, a commoner of Christ Church, and Robert Kirkham, of Merton College. Morgan led the way in visiting the sick and prisoners, and in this work the others heartily joined.

The rules of living followed by the Holy Club included frequent meetings for prayer and study. They fasted on Wednesday and Friday, received the holy communion each week, repeated a collect daily at 9.12 and 3, and practised self-denial, that they might give to those in need. In describing his acquaintance with the Wesleys, Whitefield says he saw them "go through a ridiculing crowd to receive the holy eucharist at St. Mary's." In going from house to house among the poor, Wesley at first used words of Greek and Latin origin, and noticed that there was often only a stare when he looked for a reply from those he visited. He was talking over their heads. This experience drove him to the use of simple words. The "plain people" then and throughout his ministry easily understood him. This earlier Oxford movement thus had its practical side. It exemplified the faith that works.

A turning-point in Wesley's life was the death of his father. When his health failed, the Epworth rector was anxious that his son John should succeed him in the parish, but the latter refused to make application for the living, on the general ground that he could be of more service where he was. He seems subsequently to have reconsidered the matter, and to have sought unsuccessfully to obtain the living. As Wesley himself declared, his parish was to be the world.

When Wesley was thirty-two, he joined the colony in Georgia, of which General Oglethorpe was Governor, his desire to preach to the Indians being a controlling motive in the matter. His brother Charles, who had just been ordained, went out as secretary to the Governor. This colony, it will be remembered, was designed to be a home alike for Englishmen and for Continental Protestants who had suffered persecution. The Church authorities did much to encourage the enterprise, and Wesley was sent as a missionary by them. It is in keeping with the poetic readiness of the Wesley family to find that Samuel Wesley, Jun., published a poem in furtherance of this venture of faith and philanthropy. With the Wesleys went, as special companions, Benjamin Ingham, one of the Oxford Methodists, and Charles Delamotte, the son of a Middlesex magistrate. On February 5, 1736, the vessel which bore the Wesleys sailed into the Savannah River. John Wesley's mission centred in Savannah, then a place of 500 inhabitants. His preaching at once made a great impression. For example, he "expounded those Scriptures which relate to dress" with the result that while he remained in Savannah he saw in the church "neither gold nor costly apparel." On the other hand, he roused opposition by his High-Church doctrine and practice. Though Wesley did not have the opportunity he desired to work among the Indians, he seems to have had hard enough material to deal with. His chief trial in Georgia grew out of his acquaintance with Sophia Hopkey, niece of Mr. Canston, the chief magistrate of Savannah. The marriage of Wesley to this





JOHN WESLEY AT THE AGE OF FORTY.—From a Painting.

bright and handsome young woman seemed probable, but Wesley took counsel of religious friends, and accepted their advice to "proceed no further in this business." Miss Hopkey soon became engaged to another, and was married four days later. In Wesley's journal it is written, "On Saturday, March 12, God being very merciful to me, my friend performed what I could not." A half-century afterward Wesley referred with much feeling to this painful experience. Wesley had occasion to rebuke Mrs. Williamson (Miss Hopkey), and finally he repelled her from the holy communion. Her uncle, Mr. Canston, took up the matter, and the Grand Jury found several indictments against Wesley. The latter repeatedly went to court, but was given no opportunity to clear himself from the charges, which chiefly concerned his ecclesiastical administration. It was decided that he had best return to England. The malice of his enemies followed him to the last. Not long after Wesley's departure from Georgia, Canston's accounts were deemed unsatisfactory, and he was removed from his offices in the colony. Whitefield, who was in Georgia later on, bears witness that Wesley's mission was by no means a failure, though he had so much to distract him: "The good Mr. John Wesley has done in America is inexpressible." The lasting effect of that brief ministry in Georgia is typified by the live-oak-tree under which Wesley preached, which still stands near Savannah.

In February, 1738, Wesley was once more in England. The genial climate of Georgia had done much for his health, and he was ready for work among familiar surroundings. To this period belongs what Wesley calls his conversion. Contact with Moravians on the voyage to Savannah and during his stay there had made him ready to receive gladly the exhortations of Peter Böhler, a young Moravian, who had just been set apart for work in America. "By him" (Böhler), writes Wesley, "in the hands of the great God, I was, on Sunday, the 5th [March, 1738], clearly convinced of unbelief, of the want of that faith whereby alone we are saved." Wesley thought himself unfit to preach, but Böhler said, "Preach faith till you have it, and then because you have it you will preach faith." A further record is that on the evening of May 24th of that year, "about a quarter before nine," he received "an assurance that He had taken away *my* sins—even *mine*—and saved *me* from the law of sin and death." Naturally enough, many of Wesley's friends were disturbed at his declaration that before this time he had not been a Christian, and one of them wrote that he (Wesley) was now "turned a wild enthusiast." His new state of feeling was confirmed by a visit to the Moravian settlement at Herrnhuth, near Dresden, where, as he said after his visit, he would gladly have spent his life. On his return from Germany he found much satisfaction in meeting with the London Moravians in Fetter Lane. Later on, what were deemed errors in doctrine and extravagances in methods on the part of the Moravians made a breach between them and Wesley. Nevertheless, he was always grateful to them for helpful words and examples.

As William Morgan had led Wesley into visiting the sick and prisoners, so now Whitefield set him the example of field-preaching. Shut out from churches, Whitefield had begun preaching in the open air. Kingswood colliers made up his first congregation, tears making white channels down their grimy cheeks. Forthwith great multitudes came to hear him, and he sent for Wesley to help him. Of the first field-preaching service he attended, Wesley writes, "I could scarce reconcile myself at first to this strange way of preaching in the fields, . . . having been all my life (till very lately) so tenacious of every point relating to decency and order that I should have thought the saving of souls almost a sin if it had not been done in church." But Wesley at once "submitted to be more vile, and proclaimed in the highways the glad tidings of salvation." His first field sermon was given "from a little eminence in a ground adjoining the city" (Bristol). He spoke to 3000 people. In a few weeks he began field-preaching in London, an audience of 12,000 or more gathering on Blackheath. He paid special attention to the rich he saw present, some of whom, as he says, "drove away in their coaches from so uncouth a preacher." Not even the remarkable results of his out-door preaching could make it seem to him an easy way of reaching men. "What marvel the devil does not love field-preaching! Neither do I. I love a commodious room, a soft cushion, a handsome pulpit. But where is my zeal if I do not trample all these under foot in order to save one more soul?"

Wesley was a less impassioned preacher than his brother Charles, but yet his calm voice and piercing eye made some of his hearers tremble and fall to the ground. The extreme nervous excitement and occasional convulsions produced by his sermons were the subject of angry comment on the part of Wesley's enemies and critics. He had "turned the world upside down." His good sense and logical habit put a proper estimate, however, upon these "strong cryings." He was quick to detect fraud when any tried to gain his attention and favor by exhibitions of excessive emotion. His ready tact, likewise, served him well in dealing with crowds. He profited by interruptions, and the wrath of a mob contributed to his calmness, and furnished him with an occasion to speak homely truths to men who most needed them. While preaching at Bath, for instance, the notorious Beau Nash cried out to him that he frightened people out of their wits. In reply to Wesley's question, Nash acknowledged that he judged the preacher only by common report. "That is not enough," answered Wesley; "I dare not judge you by common report." Nash needed this charity, and did not give Wesley further trouble.

The development of Methodism made it necessary to provide buildings for the congregations, and the first Methodist preaching-place in Bristol was built chiefly through Wesley's efforts. He had little money, but he felt sure he could redeem the obligations he incurred, because "the earth is the Lord's." In London a building which had been the Royal Foundry was bought, and, after suitable repairs and additions, was for forty years the head-quarters of the Methodists of the metropolis. The chapel held about 1500 people. Here were Wesley's apartments, his mother living with him. A house adjoining was a home for the preachers assisting Wesley. Here, too, was a room for the sale and distribution of books and tracts, some of which Wesley and his brother Charles had prepared. This building, in turn, was succeeded by the City Road Chapel—a name and place dear to the hearts of Methodists the world over.

There is no space to dwell on the doctrinal differences between the Wesleys and Whitefield, the latter being a Calvinist, and, as the dissension increased, preaching against the brothers by name. Other Calvinists, who had been Wesley's friends, joined Whitefield in the opposition. The whole story belongs to the history of doctrinal controversy, save as it illustrates Wesley's forbearance, kindliness, and readiness to discuss disputed points, if earnestly, at least in a Christian spirit. He was not ready to deny that his opponents were the subjects of "free grace."

In the organization of Methodist societies Wesley followed, in a measure, a plan which the Church of England had used. In London, for example, until the spiritual deadness of the time had almost put an end to them, there were parish organizations for devotional and charitable purposes. When Wesley formed the society at the Foundry he knew what a power it could be made if the members were in earnest. There was no lack of zeal, and while other societies were soon organized, the London society was the centre of Wesley's work. He summed up the stages of the growth of Methodism by saying that its first rise was in the meetings at Oxford, its second in the work in Savannah, and its third in the forming of the Foundry society.

Another important feature of Methodism, the class system, had its beginning in the Bristol society in 1742. A debt remained on the preaching-place in Bristol, and it was proposed that the members give a penny apiece at stated times toward its payment. Then a leading man suggested that eleven of the poorest members be put with him, and that he would make up any deficiency. Other similar groups were formed. An extension of the scheme to include a report by the leader on the spiritual condition of the group was natural. The meetings of these groups thus came to assume the form of the historic class system. Back of the movement, however, was Wesley's masterly talent for organizing—a gift which he clearly rec-